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**Crime, Law
and Social Science**

Crime, Law and Social Science

BY

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PREFACE

I

This book was originally written as the report of a survey which was made under the auspices of the School of Law of Columbia University for the Bureau of Social Hygiene for the purpose of determining whether or not it is desirable at this time to establish an institute of criminology and of criminal justice in the United States and of planning such an institute if as the result of the survey it should prove to be desirable to establish one. The Bureau has graciously given the authors permission to publish a revision of their report in this form, but the Bureau wishes it understood that this permission does not in any way imply approval of the conclusions and recommendations of the authors.

In order to answer the questions which the Bureau formulated as the problems of the survey, it was necessary to undertake an examination and an evaluation of the state of knowledge and of the methods of research in the fields of criminology and of criminal justice. This in turn involved an analysis of the nature of empirical science and its differentiation from other kinds of knowledge; a consideration of the value of different kinds of knowledge in the solution of the various practical problems engendered by the phenomena of crime; the separation of the field of criminology from that of criminal justice in terms of the kinds of knowledge needed to solve their respective problems; and, finally, a definition of the theoretical problems of the criminal law, in the light of which the different bodies of knowledge which are useful to the legislator and the judge could be properly related and subordinated.

It is this last point which the authors wish to make the pivotal theme of this book. It can be formulated most generally in the question what is the relation of law to the social sciences.

In so far as this book answers the question it does so, of course, in terms of the criminal law, on the one hand, and of criminology, on the other. But the specificity of the terms in which the answer is given does not render the answer insufficient to the general question. The criminal law can be taken as representative of any body of substantive law; as a body of substantive law it differs in no essential respects from the law of torts, of contracts, or of property, for example. Similarly, criminology can be taken as representative of the social sciences in the sense that its problems and methods as an empirical science are in essence the same as those of such social sciences as economics and sociology. Moreover, it will be seen that criminology is peculiarly dependent upon psychology and sociology and therefore represents them in subject matter as well as in problems and methods. The relation of criminology to the criminal law can thus be taken as typical of the relation, for instance, of economics and psychology to the law of contracts, and, generally, of the relation of social science to law.

The phenomena of crime and of business are clearly among the loci of the intersection of science and law. With respect to crime the investigator asks what are its causes and what are its effects; the legislator asks what behavior shall be proscribed and how shall transgressors be treated by the state. The transactions of commerce and the undertakings of industry present similar sets of questions to the investigator and to the legislator respectively. The end of the investigator in either case is a theoretical one; it is knowledge which he seeks, whether or not that knowledge be ultimately useful in practical affairs. The end of the legislator in either case is a practical one; he seeks to control and regulate the conduct of men in society. The question of the relation of social science to law is therefore the question of the extent to which and of the way in which such knowledge is useful in the solution of legal problems, either by the legislator, the judge or the jurist.

Current controversy about the relation of social science to law is unfortunately confused by the introduction of other and

extraneous issues, such as whether or not law is itself one of the social sciences, whether or not the problems and methods of legal research are the same in kind as those of research in the social sciences. That the propositions of law do not constitute an empirical science, that is, a body of knowledge somehow derived by inference from observation, need not be argued here. That a body of law, such as the criminal law, can be scientifically expounded in the sense in which a rational science is a certain kind of analytical exposition, does not mean that law is a species of science but rather that the principles and rules of law constitute a subject matter of which there can be a science, as well as a history and a philosophy. Similarly, sociology, economics, psychology, criminology are the names of subject matters of which there can be sciences. The question therefore is whether law as the subject matter of a science is like sociology or economics as the subject matter of a science. The question cannot be answered except in the light of the distinction between empirical and rational science. But it can be said here that the word 'law' is sufficiently ambiguous to make both answers possible. Law in the sense of a body of propositions having distinctive form can be expounded in the manner of a rational science; law in the sense of existing legal institutions, processes and events can be studied in the manner of an empirical science. But the propositions which will result from the investigation of legal institutions, processes and events in the manner of an empirical science will not be propositions of law; they will be empirical scientific propositions. And the propositions which result from the enactments of legislators and the decisions of judges are not scientific propositions; they are propositions of law, which are capable of being studied in the manner of a rational science.

Our major problem must be stated in terms of law in this last sense. When we ask what is the relation of social science to law we are not asking what is the relation of one social science, let us say economics, to another, namely, law in the sense of an empirical study of legal institutions, processes and events; we are asking rather what is the relation of any empirical knowledge,

including that derived from an empirical study of legal institutions, processes and events, to law in the sense of the propositions which result from legislative enactments and judicial decisions.

However, we have not ignored the problem whether or not legal institutions, processes and events can be studied in the manner of an empirical science. On the contrary, we have examined the knowledge which research has yielded about the administration of the criminal law, that is, the institutions, processes and events of criminal justice. While this knowledge is empirical in the sense that it is based upon observation, it is merely descriptive; it lacks both the generality and the analytical form of empirical scientific knowledge. Furthermore, if the empirical investigation of legal data ever becomes scientific in form, the results will necessarily be part of an established science, called either sociology or political science or by some such name. Legal institutions and processes are not *sui generis*; they are like other social or political institutions and processes. If there is ever a science of social or political institutions and processes, it will or can be made to include scientific knowledge about the law as one set of social institutions and processes. In other words, empirical knowledge about the law will retain its separate entity only so long as such knowledge is merely descriptive, merely a fund of information. Our discussion of knowledge of the administration of the criminal law is generally applicable to knowledge of the administration of any branch of substantive law.

We have chosen to orientate this book around the theme of the relation of law and social science because of its contemporary importance. The rise of what has been called sociological jurisprudence followed the development of the social sciences in the latter half of the nineteenth century. More recently American university law schools have undertaken and projected reforms in legal education in the belief that the study of law should be more closely affiliated with the study of the social sciences. Associated with this movement in legal education, if not responsible for it, have been attempts to make jurisprudence 'realistic' or 'scientific', to formulate the problems of legal research as if they were prob-

lems in empirical social science. In short, the effort has been to introduce both the content and the methods of the social sciences into the study and practice of the law. Current controversy of the issues thus raised has been profoundly unclear, largely because empirical science has not been defined and distinguished from other kinds of knowledge, and because of the ambiguity of the word 'law' as denoting both the body of propositions created by legislators and judges and the institutions and processes by which law in this first sense is made and administered. When such definitions and distinctions are made, it is readily seen that none of the so-called social sciences are yet established as empirical sciences; that the study of law in the first of the above senses is utterly independent of them; and that empirical knowledge of social phenomena, whether descriptive or scientific, is relevant to the practice, not the study, of law.

We feel therefore that this book performs the negative task of clarifying many of the issues in contemporary jurisprudence, as well as the constructive task of formulating the relation which will obtain between the empirical social sciences, if and when they exist, and the practice of law. The practice of law, whether by legislator, judge or lawyer, is dependent both upon knowledge of the law and upon knowledge of society, its members, its institutions, its processes. The former knowledge is rational in character; the latter may be either empirical or rational. We have so far omitted reference to the rational sciences of ethics and politics although in the fuller analysis which this book presents it will be seen that the empirical social sciences are strictly subordinate in utility to these rational sciences. Empirical knowledge cannot be used intelligently in the practice of law until the ends of practice are determined. This determination can be made only rationally by means of the principles of ethics and politics; these two sciences furnish the bases for the rational exposition of any body of substantive law. We have exhibited this dependence, of course, in terms of the substantive criminal law, but the case is typical.

Our analysis of criminology and criminal justice and of the way in which they are related has a general significance in so far as it is applicable to social science and law and to their relationship. We hope that this generalized significance gives this book some importance as a contribution to contemporary jurisprudence. But it has, of course, a much more restricted significance in relation to the problems of crime. In this restricted significance, its importance must be estimated by reference to current shibboleths and panaceas. The problems of crime are socially so urgent and pressing that it is natural for remedies and reforms to be proposed and widely propagandized. These remedies and reforms fall into three groups: first, those which propose changes in the content and administration of the criminal law in the name of science, such, for instance, as the attachment of psychiatrists to criminal courts; second, those which advance schemes for the prevention of crime both by means of the administration of the criminal law and by other means, also in the name of science; and, third, those which advocate changes in the institutions and processes of criminal justice in the light of our knowledge of its inefficiency and the conditions thereof.

Whenever a solution of any of the problems of crime is advanced in the name of science, whether the solution take the form of a change in the criminal law or its administration, or the form of some non-legal device, it is extremely important to ask whether the knowledge appealed to is or is not scientific and, if not, whether its validity and significance are such as to render it capable of being used practically. Our critique of social science in general and of the researches of criminologists and of students of the administration of the criminal law in particular, enables us to answer these questions. We find that no scheme of prevention, no alteration of criminal justice with a view to prevention, yet proposed is based either upon scientific knowledge or upon descriptive knowledge which possesses a validity and a significance which give it practical utility. All attempts to solve the problem of controlling crime are therefore no better than haphazard trial and error efforts. We feel that the recognition of

this state of affairs is of great practical importance, since the obstinate maintenance of shibboleths and doctrinaire opinions in the name of science prevents an honest acknowledgment of our profound and extensive ignorance. Until our ignorance is acknowledged, until our lack of science and of any other kind of valid and significant knowledge is admitted, we will not stop this trial and error fumbling. We will not begin to solve the problem of controlling criminal behavior in the only practicable way, namely, by attempting to enlarge our knowledge.

We find, on the other hand, that while we have no scientific knowledge of the institutions and processes of criminal justice, knowledge of that character is not indispensable in attempts to increase the efficiency with which the criminal law is administered. We do possess descriptive knowledge of these institutions and processes. While knowledge of that sort does not enable us to prevent crime, it does make it possible for us to bring about substantial improvements in criminal justice. The point is that whereas we cannot significantly interpret knowledge which is merely descriptive of criminals and their environments in terms of our common knowledge of human nature, we can significantly interpret knowledge which is merely descriptive of the institutions and processes of criminal justice in terms of our common knowledge of the conditions of the efficient conduct of practical affairs. To recognize that here we have enough knowledge to proceed to beneficent results is to identify the source of our failure to reform the administration of the criminal law. It is either our lack of interest in good government or our unwillingness to sacrifice other values for this value.

In the light of the foregoing discussion, the organization of this book takes on significance. It is divided into four parts. In the first, crime is defined; theoretical and practical problems are both distinguished and related; and the various problems of crime are formulated. In the second, the nature of empirical science and scientific method is analyzed in order to state the conditions of an empirical science of criminology; the entire field of criminological research is surveyed and criticized; and the vari-

ous proposals for the control of crime are summarized and exhibited as having no adequate foundation in knowledge and, hence, as trial and error. In the third, our descriptive knowledge of the administration of the criminal law is surveyed and evaluated; its usefulness in efforts to increase the efficiency of criminal justice is indicated; and the theoretical problems of the criminal law are analyzed and shown to be dependent for their solution, first, upon the principles of the rational sciences of ethics and politics, and, second, upon empirical social sciences if they ever exist. In the fourth, we summarize our conclusions and state our recommendations. The summary of our conclusions serves to synthesize the analysis upon which they are based. Our recommendations present our own approach to the solution of the problems of crime in the form of a plan for an institute of criminology and of criminal justice.

We think that it will be clear that whereas the end ultimately served by the creation of such an institute is a practical one, its character has been dictated primarily by theoretical interests which are necessarily prior. Furthermore, the plan of the criminological division of the proposed institute indicates in part the way in which we would proceed to remedy the deplorable conditions which now prevail in the social sciences. The plan of the criminal justice division of the proposed institute indicates a program of legal education and legal research which would reestablish both as rational undertakings, in contravention of present tendencies to make them subservient to the degraded empiricism of research in social science. In short, the critical burden of this book is balanced by what we believe to be constructive steps proposed in the form of an institute of criminology and of criminal justice; each of these constructive measures is in turn based upon one or more of the conclusions of the critical analysis developed throughout this book.

II

Since our report was submitted to the Bureau of Social Hygiene, it has been read by a number of readers who have been

good enough to comment upon it to us. From their comments we have learned what are likely to be the principal sources of misunderstanding of our position. In some cases the criticisms of the readers of the report have led us to make doctrinal corrections which are incorporated in the present text.

While we fear that we cannot eliminate the possibility that our arguments will be misunderstood, our discovery of the chief sources of misunderstanding does enable us to point out to the reader of this book errors of misinterpretation or misreading which he can avoid if he is inclined to do so. A few of the comments which we have received indicate a failure to read the text, a failure at the level of rudimentary understanding of the analysis. The reader who will be guilty of such negligence cannot be forewarned against it. But the reader who is willing to discover what the text really contains may be aided by suggestions based upon the experience of other readers. We offer these suggestions in the form of a general discussion of the terminology of the book to which we add a brief analysis of the major points of difficulty in the doctrine. Since we cannot anticipate the detailed discussion of these points in the text, the reader may learn no more here than what to look for in the text; he may not know why he is to look for it.

The problem of terminology is the most unpleasant and harassing problem which the author of a work of this sort faces. Any solution of it is usually unsatisfactory. If he resolutely attempts to use all words in their popular connotations, he will find himself using an ambiguous language and an inadequate one. If, on the other hand, he invents a new language for expressing his analysis, as Whitehead has done in *Process and Reality*, he will find that few readers will make the effort to understand him, if they read him at all. If he compromises by using the words of ordinary speech but restricts each of these words to an unambiguous significance by defining remarks and qualifying phrases, he will find that he suffers from both of the extreme positions which he has tried to compromise: readers will persist in using the familiar words in their loose and ambiguous popular connota-

tions regardless of the author's explicit directions to the contrary, and at the same time they will complain that the author is difficult to understand because he uses ordinary words in an unfamiliar way.

The problem of terminology is difficult not only because of the recalcitrance of the reader, but also because of an inescapable arbitrariness and ambiguity in the use of words. It is axiomatic that if two things are alike, they are also different; if they are different, they are also alike; and the respects in which they are alike must be different from the respects in which they are different. The same word can be used either to name a similarity between two things or to indicate a difference between them. Thus, for instance, empirical and rational sciences are alike in that they are both inadequate as knowledge. They differ in the nature and source of their inadequacy. The word 'probable' can be used to mean the inadequacy of knowledge; thus used, both empirical and rational sciences can be said to be probable. The word is thus used to indicate a similarity. But 'probable' can also be used to mean the kind of inadequacy which characterizes empirical science and which is different from the kind present in rational science. Thus used, only empirical science can be said to be probable; the same word which before indicated a similarity between the two things, now indicates a difference between them. Controversy as to whether both empirical and rational science are probable must be examined first on the verbal level in order to determine whether probable is being used in its less restricted meaning of 'inadequate' or in its more restricted meaning of 'inadequate in a certain way'; if the former is the case, they are both probable; if the latter is the case, they are not. In either case, the controversy which arose because of verbal ambiguity is resolved.

Two things are similar generically and different specifically; hence if the same word is used in a less and in a more restricted meaning, the less restricted meaning will indicate a similarity and the more restricted meaning, a difference. If any author uses the same word in both ways without explicit indication that he is using the word now generically and now specifically, he is guilty

of equivocation. It is entirely arbitrary whether a given word shall be used to indicate a similarity or a difference. Thus, we employ the phrase 'empirical science' in a restricted meaning which differentiates physics from criminology; we might have used it in a less restricted meaning in order to indicate the similarity of physics and criminology as bodies of knowledge somehow based upon experience. The analysis would not be changed by this arbitrary change in usage, because physics and criminology are clearly differentiable as bodies of knowledge, and hence some other word could be used arbitrarily to express this differentiation. Verbal usage may be arbitrary, but analysis is not. The imposition of a word upon a thing as its name is arbitrary; the assignment of a meaning to a word as its significance is arbitrary; but the similarities and differences among things are not arbitrary, nor are differences of meanings which words must be made to carry if they are to serve the intellectual purposes of definition and analysis.

A question of etiquette remains. Who has the right to determine how words shall be used? The right belongs to no one, of course, but by common courtesy the reader should concede this right to the author. In this respect, if in no other, an author must have undisputed authority, regardless of how much violence he does to ordinary usages. The author in turn is bound by decency not to be unnecessarily obscure; he should depart as little as possible from the conventions of usage; but with him ultimately must rest the decision as to the need for such departures. The reader is under no obligation to read what the author has written, but if he does so, he is obligated to follow the author in the latter's arbitrary usages so long as the author is consistent with himself.

The use of words in an elaborate and technical discussion is often arbitrary in the sense that the author imposes a restricted and definite meaning upon a word which in ordinary usage has multiple and ambiguous significance. But analysis itself is never arbitrary, so that although the imposition of restricted meanings upon words is arbitrary, the meanings themselves express dis-

tinctions essential to the analysis. Thus, if we assign different meanings to 'rational science', 'empirical science', 'descriptive knowledge', 'common sense generalizations' and 'opinions', we do so in order to make distinctions in kinds of knowledge which are essential to our analysis. We might have used five other phrases to convey the distinctions, but the distinctions would nevertheless have remained the same if the same meanings had been arbitrarily imposed upon these other phrases. If the reader has objections of any sort to the language we use, he may use his own upon one condition, namely, that he have as many verbal units in his own vocabulary as we have, so that he can express the same number of distinctions in his own language by arbitrarily imposing the same meanings upon other verbal units. What readers often do is to try to translate the author's language into their own without satisfying this condition, largely for the reason that they are not aware that the author has developed a more elaborate vocabulary than they possess, because *his* analysis has required him to do so. One language can be translated into another only to the extent that they have the same range of meanings; in the absence of such equivalence, things can be said in one language which cannot be translated into the other without serious distortion. This is the major source of misunderstanding by readers which authors cannot avoid.

We can here enumerate for the reader the basic terms in the vocabulary of our analysis. They are science, common sense, empirical, rational, opinion, theoretical, practical, proposition, validity, significance, observation, inference, probability, compendancy, system, problem, means, end, descriptive knowledge, singular proposition, general proposition, law, proposition of law, justice, subject matter, dependent, independent, determination. Each of these words is used univocally throughout with a definite, restricted significance. The reader will misunderstand the analysis if he uses any of these words without the precise delimitation of meaning which we indicate; they must not be read as they are used popularly.

One further point about the etiquette of terminology. Words possess powers of eulogy and derogation in addition to their meanings. 'Science' and 'scientific' are now generally eulogistic; 'rational' is today in certain quarters derogatory, particularly in the phrase 'merely rational'. As a result of this atmosphere of praise and blame which words unfortunately exude, the reader is disaffected by an author who misplaces terms of eulogy and derogation, and while this disaffection in no way implies disagreement in matters of analysis, it so beclouds the issue that the reader dissents without reason. Thus, for instance, in our restricted meaning of the term 'empirical science' we would say that anatomy is not an empirical science. But the reader thinks that anatomy should be praised; it is an admirable and highly useful body of knowledge; he objects, therefore, on no other ground than that anatomy has been derogated. But to say that anatomy is not an empirical science is not to say that it is not admirable or useful. We are using empirical science in a sense which includes physics and excludes anatomy; to include both would change our meaning and our analysis of the nature of empirical science. *There is no derogatory imputation involved*, unless the reader agree with us that as knowledge physics is more admirable than anatomy. If he does, he will not object to the imputation; if he does not, he must still attempt to understand the distinction we have made even though he adds, for himself, that anatomy is somehow better, even if it is not scientific in the sense defined.

The main suggestion to the reader in this matter of terminology is that it is incumbent upon him to keep inviolate the distinctions which the authors make. He must remember that the distinction of two things is always in a certain specified respect and that, hence, distinction does not abrogate or deny similarity in other more generic respects. The reader finds the authors in error whenever he discovers an untenable distinction or an inconsistency in analysis as a result of incompatible distinctions; he cannot claim error merely by insisting upon the similarity of

two things in a respect other than the one in terms of which they have been distinguished.

We now turn to a number of doctrinal points to which we wish to call the reader's attention.

(1) The distinction between scientific knowledge and common sense knowledge is crucial to the argument of this book. Common sense knowledge is defined in Chapter IV as consisting of highly probable generalizations derived from the common experience of mankind. These generalizations do not form a system or even a compendent set; they do not constitute a science. They are distinguished from the opinions of individuals in that they express the uniformities of common experience. Common sense knowledge must be distinguished from common sense or prudence. It is by common sense that the ordinary practical activities of everyday life are directed; it is common sense which derives from experience the generalizations which we have called common sense knowledge. The generalizations of empirical science, like those of common sense, rest upon experience and are derived from it by prudence and intelligence; they differ in that in their derivation intelligence is directed methodically and is aided by special techniques, and in that taken together they constitute an analysis of some limited portion of experience which is the subject matter of a particular science.

The distinction between scientific and common sense knowledge is basic to the distinction which we make between the practical problems involved in the control of crime, on the one hand, and those involved in the improvement of criminal justice, on the other. We have common sense knowledge both about the phenomena of crime and about the kind of activities which occur in the administration of the criminal law. In both cases we also have descriptive knowledge. Waiving for the moment the question of the validity of this descriptive knowledge, we hold that the common sense generalizations which we possess about the phenomena of crime do not enable us to interpret our descriptive knowledge of these phenomena; our descriptive knowledge therefore re-

mains insignificant and we are unable to control or prevent crime. The reason for this failure can be stated simply: the common sense generalizations which we possess about human nature are inadequate before the complexity of the fundamental theoretical problem of crime, the problem of its causes. We understand the complexity of this problem sufficiently well to perceive immediately the inadequacy of our common sense knowledge. On the other hand, what we commonly know about the conditions of efficiency in the administration of other enterprises enables us to interpret our descriptive knowledge of the processes of criminal justice and to formulate a definite practical program for their improvement. In short, the practical problems of criminal justice can to a considerable extent be solved by common sense knowledge although scientific knowledge would be more useful. But the practical problems involved in controlling criminal behavior require scientific knowledge for their solution, knowledge of the etiology of crime which common sense does not provide.

That common sense knowledge is not adequate for the solution of the practical problems of preventing or controlling crime does not mean that common sense (ordinary prudence or practical intelligence) can be dispensed with in their solution. Science by itself never solves practical problems; science must be applied to particular cases since practical problems have their locus in the particular. The practical employment of science is technology, but technology is like science too generalized in its rules and formulations. Technology must be guided by common sense in the particular situations in which it is used, since they are always dissimilar and present novelties to which technology must be adjusted by intelligence. Intelligence or common sense must modify and qualify the rules. An empirical science of criminology is a necessary but not a sufficient condition of the solution of the practical problems of controlling crime.

(2) There are a number of bodies of knowledge which are not merely aggregations of descriptive knowledge and yet are not empirical sciences. They are not empirical sciences because they

fail to satisfy the condition that their general propositions assume functional form. Such bodies of knowledge as anatomy and systematic botany are constituted by sets of compendent general propositions which have probabilities determined by reference to empirical evidence gathered by observational work of an extremely careful and precise sort. But these general propositions state the characteristics of classes of entities; they do not formulate the interdependence of these classes. The classes, in other words, are not adequately defined but are merely described; when the members of a set of classes are defined they necessarily become related by subsumption and dependence; and these relations are expressed in functional formulae. The construction of a set of classes which are sufficiently described to be differentiated is a taxonomy, that is, a taxonomy is a classification, and it is a body of empirical knowledge when the classification is based upon empirical evidence. Anatomy and systematic botany are empirical taxonomies. An empirical science is an etiology; it is not merely a classification, but an organization of classes as interdependent. Anatomy and systematic botany are not empirical sciences, although they are stages in the development of empirical sciences which will appear when the classifications are refined into definitions and functional formulations can be derived. Anatomy, for instance, will some day be absorbed into a developed empirical science of physiology. That anatomy is now popularly recognized as an independent empirical science is due to the fact that it is an extremely useful body of knowledge; but that it has this popular status must not mislead us. A useful taxonomy is not an ultimate development of empirical investigation in any field; it is not coordinate with etiology but a precursor thereof. Etiologies are developed out of taxonomies.

This distinction between taxonomies and etiologies enables us to make two further comments which are not made explicitly enough in the text and which may prevent misunderstandings that have already occurred. In the first place, our distinction between descriptive knowledge and empirical science is a distinction between the ideal limits of a series which has many intermediate

stages. A given body of empirical knowledge may not be either descriptive or scientific in the sense that it is exclusively the one or the other. It may be somewhere between these ideal limits; it may have some of the traits of knowledge which is merely descriptive, and some of the traits of a perfect empirical science. Taxonomies represent an intermediate stage of this sort; there are many other stages between these extremes which cannot be named. When we say that the social sciences are not yet developed as empirical sciences we do not mean that as they exist they have none of the traits of empirical science, but rather that they possess these traits to an insufficient degree. There are bodies of knowledge, such as that which is called 'descriptive economics', which are not merely descriptive. Descriptive economics is to some degree taxonomic; similarly there are parts of psychology which are developed as taxonomies. These bodies of knowledge represent stages in the development of empirical social sciences in the same sense in which anatomy is a stage in the development of an empirical biological science. We might add here that our distinction between empirical and rational science is of the same sort. Empirical science and rational science are defined as ideal limits of a series. A given body of knowledge may possess some of the traits of empirical science and some of the traits of rational science; it can be watched historically in its development from one extreme to the other; what starts as empirical science becomes rational science by passing through intermediate stages of development.

In the second place, our criticism of what currently passes as social science is thoroughly misunderstood if it is read as expressing a note of ultimate and irremediable pessimism. Quite the contrary. It must be read as an argument for the possibility of empirical science in the various fields of social investigation. It is pessimistic only in the sense that it reiterates the warning that unless the methodology of these investigations is corrected, that possibility will never be realized.

(3) In Section 2 of Chapter XI the controversy regarding the justifiability of the punitive and the non-punitive ends of the

criminal law is analyzed, and a resolution of the opposition is offered. The relevance of this discussion to the problems of criminology has probably not been made sufficiently clear. It is crucially important, however. If it were rationally impossible to hold any position other than that justice requires all criminals to be punished, then even though it were established that punishment is responsible for recidivism, society would be enjoined from reducing the amount of crime by the elimination of recidivists, since such elimination, if achieved by non-punitive modes of treatment, would be essentially unjust.

Our conclusion in Chapter XI is that it is rationally impossible to hold the position that justice requires all criminals to be punished; that the determination of whether criminals are to be treated punitively or non-punitively rests ultimately upon the determination of the effects of such treatment. In short, we have asserted that the Aristotelian position is the correct one, and that the Kantian position is intrinsically untenable. But our resolution of this opposition is imperfect to the extent that we have failed adequately to state the Kantian position. Our analysis of the controversy between the punitive and non-punitive schools is accurate to the extent that it deals with the punitive position in the terms in which it is traditionally stated by the followers of Kant. This traditional formulation is untenable. But Kant's own position rests upon grounds which we have not examined in the text. They can be stated briefly as follows: ethical considerations are prior to and independent of political or social considerations; justice considered ethically is concerned with the rightness of the individual utterly apart from his goodness as a citizen and the welfare of the state. Punishment is justified as indispensable to the correction of the erring individual will; a society which failed to punish criminals would be ethically defective even if it achieved the social welfare by this failure. The Aristotelian position, on the other hand, views politics as the architectonic science; the individual good and the social good are interdependent. Crimes are acts which are essentially social or political in character, and hence the determination of the treat-

ment of the criminal must be with reference to the good of the state.

The question of the priority of ethics or politics cannot be fully discussed here. But even if the opposition between Aristotle and Kant on this point is ultimately not resolvable, there can be resolution of the controversy about the final end of the criminal law. The resolution of the latter opposition is clearly indicated. The criminal law is an instrumentality of the state; hence it is proper for its end to be a political end, that is, the good of the state. Kant recognizes this when he considers the criminal law and what he calls political as opposed to moral punishment, as pragmatic. It is irrelevant that a *merely* pragmatic criminal law must be, for Kant, unethical. A body of criminal law which ceased to be pragmatic in this sense would cease to be a political instrument. In short, a body of criminal law which is justified entirely by ethical, and not at all by political, standards must necessarily be Divine law; it cannot be state law. Our conclusion in Chapter XI that the end of the criminal law is not necessarily punitive, is correct, although the grounds of that conclusion, so far as they involved a denial of the Kantian position, are not there adequately stated.

(4) We have maintained that an empirical science of criminology is possible. It has been objected that such is not the case *because* crime must be defined in terms of the criminal law. The objection can be more explicitly stated. Specific crimes change with changes in the behavior content of the criminal law. How can the causes of crime be investigated if the acts which are criminal vary with changes in the criminal law? This objection can be answered. The criminal law is the formal cause of crime. The criminologist as a scientist is seeking the efficient and material causes of crime. Although the efficient and material causes are never entirely independent of the formal cause, they do have a range of independent variation which can be investigated when the formal cause is held constant. It is an essential condition of the possibility of an empirical science of criminology that the criminal law be viewed as a constant formal cause. A developed

science of criminology will contain a number of diverse etiologies of crime according as crime has different formal causes. It is only necessary that each of these etiologies, which is an analysis of the efficient and material causes of crime, explicitly state the definition of the crime under investigation, that is, its formal cause.

The answer to the objection can be seen more clearly if it is realized that crime *qua* crime has no efficient or material cause. Only specific crimes, namely, acts which are crimes by reason of the behavior content of the criminal law as formal cause, are subject to etiological investigation. Hence to say that since behavior is criminal only because it is made so by the criminal law, an empirical science of criminology is impossible, would be to say that the etiology of specific kinds of conduct is intrinsically incapable of being known. If this were the case, an empirical science of human behavior would be impossible. But there are no grounds, either rational or empirical, for supposing this to be the case.

If all that is involved in the objection under consideration is that a fully developed empirical science of human behavior would necessarily include an empirical science of criminology, that is, of criminal behavior, the objection is granted, but it will be noticed that thus formulated the objection does not assert that criminology is impossible because the criminal law is the formal cause of crime.

We conclude this preface, as we began it, by referring to the project which made this book possible. We refer to it again for the purpose of recording our great indebtedness to the Bureau of Social Hygiene which initiated and financed the survey, to the members of the Bureau's staff who aided in its execution in every possible way, and to Messrs. Boris Brasol, Charles E. Gehlke, Alexander M. Kidd, George W. Kirchwey, Raymond Moley, Morris Ploscowe, Thorsten Sellin, Bruce Smith, Albert Warren Stearns, Edwin H. Sutherland, William I. Thomas and Leon A. Tulin, the distinguished group of workers in the fields of criminology and of criminal justice, with whose assistance the survey was

conducted. We hasten to add, however, that the analysis offered in this book and the conclusions and recommendations based thereon are ours alone, and that these gentlemen are not to be held accountable for them.

We must also express our gratitude to Dean Young B. Smith and Professor Karl N. Llewellyn of the School of Law of Columbia University and to Mr. Arthur Rubin, who with unbounded generosity have helped us in this undertaking in ways too numerous to mention.

The authors wish finally to say that this preface is also an epilogue and should be read as such.

J. M.

M. J. A.

December, 1932.

PART ONE

INTRODUCTION

Chapter I

THE NATURE OF CRIME

Such words as crime and criminal, delinquent and delinquency, are currently used with a variety of meanings in technical as well as in popular discussions of crime. It is therefore necessary at the very threshold of this discussion that we should precisely state the meanings with which we shall employ them.

It is important for purposes of discourse and exposition that these words should be defined as precisely as possible; it is even more important, as we shall see, for purposes of the study of crime and criminals. It is, for example, impossible to observe and study criminal behavior unless it can be defined in such a way as sharply to distinguish it from non-criminal conduct. So, too, unless the class of criminals can be defined in such a manner as to distinguish them from the class of non-criminals, we shall be unable to identify criminals in the general population and, hence, unable to observe and study them. In brief, we cannot make empirical investigations of crime and criminals unless we have some basis for differentiating criminal from other behavior and criminals from other persons, which is so precise and definite that we will not confuse them in our observations.

Attempts have been made to define crime in moral terms and in social terms. The definition of crime as behavior which is immoral lacks precision and clarity. Opinions on questions of morals are notoriously diverse and confused. If there was ever a time when the population of a community were single-minded in their moral judgments, that time has long since passed. There

is no moral code to which all men or even all men in a single community subscribe.

The definition of crime as antisocial behavior is hardly more precise or less ambiguous although it does shift the emphasis somewhat from what is thought of as the intrinsic quality of conduct to its social consequences. But we do not know and can seldom discover more than the initial and immediate effects of any behavior, and even these we can often know only in a superficial way. Moreover, here, again, values with respect to which there is no general agreement intrude themselves; again we are confronted with the necessity of evaluating behavior by standards which are necessarily largely personal. It is not enough to know the consequences of behavior; we must pass judgment upon them as social or antisocial.

The most precise and least ambiguous definition of crime is that which defines it as behavior which is prohibited by the criminal code.¹ The criminal law describes many kinds of behavior, gives them names such as murder and arson and rape and burglary, and proscribes them. If crime is defined in legal terms, the only source of confusion is such ambiguity as may inhere in the legal definitions of specific crimes. It is sometimes difficult to tell whether specific conduct falls within the legal definition, whether, for example, a specific homicide is murder or what degree of murder, as that offense is defined by law. But even so, the legal rules are infinitely more precise than moral judgments or judgments with regard to the antisocial character of conduct. Moreover, there is no surer way of ascertaining what kinds of behavior are generally regarded as immoral or antisocial by the people of any community than by reference to their criminal code, for in theory, at least, the criminal code embodies social judgments with respect to behavior and, perhaps, more often than not, fact conforms to theory. Most of the people in

¹Not only is the legal definition of crime precise and unambiguous, but it is the *only possible* definition of crime. This is what is meant by the subsequent statement that the criminal law is the formal cause of crime. The definition of particular crimes by the criminal law may be inadequate in the sense that it may not make criminal all the types of behavior which *should* be made criminal.

any community would probably agree that most of the behavior which is proscribed by their criminal law is socially undesirable.

Questions as to the immoral or antisocial character of behavior thus enter into the question whether a specific kind of behavior shall be prohibited, that is, shall be made criminal; they are, as we shall see, questions for the legislator. But they do not enter into the question whether specific kinds of behavior are criminal. To answer that question one need ascertain only whether the conduct in question is prohibited by the criminal law. In other words, a crime is merely an instance of behavior which is prohibited by the criminal law. It is in this sense that we shall use the term crime throughout this discussion.

It follows that a criminal is a person who has behaved in some way prohibited by the criminal law; and he is a criminal whether or not he has been convicted of his crime or, indeed, whether his crime is known either to himself or to anyone else. However, unless criminality has been officially determined by the legal processes established for that purpose, it must nearly always remain in doubt. The most certain way, therefore, to distinguish criminals from non-criminals is in terms of those who have been convicted of crime and those who have not. It would obviously be most difficult in any other way to identify the immoral or antisocial persons in the population or to distinguish between criminals and non-criminals. We do not mean to say either that all persons convicted of crime are criminals or that all criminals are convicted of their crimes; we mean to say only that both for practical purposes and for theoretical purposes we must proceed as if that were true. However inadequate conviction of crime may be as a test of criminality, in no other way can criminality be established with sufficient certainty for either practical or scientific purposes. The criminologist is therefore quite justified in making the convict population the subject of his studies, as he does.

In the same way and for the same reasons we shall use the word delinquency to mean the criminal behavior of a person below some age prescribed by law, and the term delinquent to

refer to a person whose delinquency has been officially determined. The legal definition of delinquents often includes young persons who are neglected or whose conduct and environment seem to point to a criminal career. Words such as these are too vague and indefinite to enable us to distinguish between young persons who are delinquent and those who are not. Throughout this discussion we shall therefore use crime and delinquency as identical terms, except that by the former we shall mean the criminal behavior of adult, and by the latter the criminal behavior of juvenile, offenders. Delinquency often precedes criminality in the case of the same individual, and delinquency is commonly regarded as a step in the development of criminality. Indeed, as will later appear, a very large proportion of all criminological research has been concerned with delinquency and delinquents rather than with crime and criminals. In this discussion we must therefore take delinquency as well as crime into account. However, in large part the problems of crime and delinquency are identical. It will therefore not be necessary as a rule to consider delinquency as such or to distinguish between criminals and delinquents. We shall use the word offense to refer indiscriminately to criminal and delinquent behavior, and the term offender to refer in the same way to criminals and delinquents.

As they exist in the general population, the class of potential offenders includes those who have as well as those who have never offended. However, we shall find it necessary to distinguish between those who have and those who have never committed crimes or delinquencies and we shall refer to the former as actual, and to the latter as potential, offenders, criminals or delinquents.²

²As we have said, the most certain way in which to differentiate between those who have and those who have never offended in fact, is in terms of the official determination of their criminality or delinquency. It is thus possible that one who must be classified as an actual offender because his 'guilt' has been officially determined, may never in fact have committed any crime. It is also very likely that many persons who are offenders in fact will be classified as potential offenders merely because their criminality has not been officially established. The distinction is thus in many cases merely a distinction between those who have been convicted of crime and those who have not. This enormously complicates the problems of the criminologist, as we shall see, but there seems to be no practicable way at present of avoiding the complication. If the distinction between actual and potential offenders is one which must be made in the study of criminal behavior, greater efficiency in the detection of crime and in the apprehension and prosecution of criminals is of scientific as well as of practical importance.

Actual criminality or delinquency thus has reference to behavior which has occurred in the past; potential criminality or delinquency to that which may occur in the future. We shall therefore use the term criminal or delinquent behavior to refer both to actual and potential criminality or delinquency, to crimes and delinquencies that have been committed in the past and to those which may be committed in the future

There are other reasons for defining crime and criminals and delinquency and delinquents as we have defined them. The empirical studies which have heretofore been made of criminals and delinquents have almost invariably been studies of persons whose criminality and delinquency have, in the first place, taken the form of behavior which is prohibited by the criminal law, and have, in the next place, been established by legal processes. Obviously, criminals and delinquents cannot as a rule be studied until they have come into official custody and have in this way been segregated from the rest of the population.³ To define crime and delinquency, criminals and delinquents, in other than legal terms, would therefore be to ignore the conditions of past as well as of future research in the field of criminal behavior.

If crime is merely an instance of conduct which is proscribed by the criminal code it follows that the criminal law is the formal cause of crime. That does not mean that the law produces the behavior which it prohibits, although, as we shall see, the enforcement or administration of the criminal law may be one of the factors which influence human behavior; it means only that the criminal law gives behavior its quality of criminality. Without a criminal code there would be no crime, however much immoral or socially undesirable behavior might survive its repeal. From this point of view, the question involved in the formulation or amendment of a criminal code can be stated as what crimes do we wish to cause. As we shall see, this is a useful way for the law-maker to state his problem.

³There are exceptional studies of potential offenders as, for example, Locard's study of the organization of street gangs, or Reiss' observations of professional prostitutes and their rôle in burglaries

Chapter II

KNOWLEDGE AND PRACTICAL PROBLEMS

Section 1. Practical and Theoretical Problems.

It is impossible and unnecessary for our purposes to consider all of the numerous problems of crime in this book. Our object will be to discover the more important and pervasive of these problems and to ascertain what knowledge we now have which is relevant to them and what further knowledge we need as a condition of their solution. Our discussion of these matters will be simplified and clarified by a preliminary analysis of the problems of crime and some consideration of the part which knowledge can play in their solution. Some of these problems are to be regarded as fundamental in the sense that a solution of many others is dependent upon their prior solution. Not all of the problems of crime are of equal practical importance. Furthermore, they can largely be reduced to types, so that to consider any type of problem is to consider every problem of that type. Finally, the kinds of knowledge and the ways in which knowledge can be utilized in practice are not unlimited. We shall accordingly find it possible to report the results of our studies in terms of the relationship of different kinds of knowledge to problems of various types.

All of the problems of crime are either practical or theoretical problems. A problem is nothing more or less than a question, and the solution of a problem is merely the answer to a question.¹ A practical problem is a question with respect to alternative

¹If the problem is a genuine one, it is a question which can be answered at the time it is asked in at least two ways, if the question admits of only one answer, there is no problem. The process of solving a genuine problem is that of determining which of possible answers should be made to a question. The question whether or not crime exists is not a genuine problem; in the light of our knowledge it is impossible to answer that crime does not exist. The question whether or not it is desirable to establish an institute of criminology at this time, is a genuine problem; it is obviously possible to answer either that it is or that it is not desirable.

courses of procedure or of action; it has its locus in the realm of affairs. The answer to a practical problem always takes the form of a decision or judgment regarding the means by which some end is to be attained. It is clear that every practical problem involves two questions, namely, what is the end which we desire to achieve and by what means shall we endeavor to achieve it. The answer to a practical problem can thus always be stated in terms of means and ends; but it is obvious that the question as to ends must be answered first. Our end having been determined, the solution of a practical problem involves the choice among alternative methods of accomplishing it. If there is only one method, there is no problem; if there is no method, the practical problem is for the time being insoluble, but in that event there is a theoretical problem which may or may not be insoluble.

The nature of a practical problem can be indicated by reference to the treatment of offenders. As a practical problem, it gives rise to the questions what are the ends to be sought in the treatment of actual offenders, whether their punishment or incapacitation or reformation, or the deterrence of potential offenders, or some other, and what are the means which shall be employed for achieving the particular end or ends which the treatment of offenders is to serve.

It is important to observe that ends may be ultimate or intermediate, and that intermediate ends may be of varying degrees of proximity. An ultimate end is the final purpose to be achieved by any activity; it is to be achieved for its own sake and not as a means to any other end.² An intermediate end, on the contrary, is always a means as well as an end; it is to be achieved as a method of accomplishing some more distant purpose. This purpose in turn may be a means of accomplishing some other and still more remote purpose; and it will always be, unless it is itself our final end. Thus, as the ultimate end of

²The ultimate end must be distinguished from particular determinations of it. Happiness is the final end of human conduct, but men disagree as to the nature of happiness and hence as to the means for achieving it. But however happiness is defined, it is always sought for its own sake.

the practical activity which we call the administration of the criminal law, the protection of society against criminal behavior is not a means to any other end.³ Among the possible means of protecting society by the treatment of offenders are, let us say, the reformation of the actual offender and the deterrence of the potential offender. But means must now be found for reformation and deterrence; from this point of view each of these means for protecting society becomes an end. If it be assumed that actual offenders can be reformed and potential offenders can be deterred by the punishment of those who commit crimes, the punishment of actual offenders becomes our more proximate purpose. This is to be achieved by the enforcement of the criminal law, which thus becomes our immediate objective.

Since an intermediate end is always a means as well as an end, it is important, as we shall see, for both theoretical and practical purposes to distinguish between intermediate and ultimate ends. The only question with respect to an ultimate end is the means of attaining it. An intermediate end gives rise not only to that question but also to the question of its efficacy as a means. If we regard punishment as the ultimate end of criminal justice and administer punishment for its own sake, we are not concerned with its effects; the only question is whether or not this or that method of treatment constitutes a punitive device. But if we regard punishment as an intermediate end, as a means to reformation and deterrence, we are very much concerned with the reformatory and deterrent efficacy of punitive methods of treatment.

A theoretical problem is a question with respect to knowledge. The answer to a theoretical problem is always stated in terms of knowledge, and never in terms of decisions and judgments. The distinction between practical and theoretical problems is indicated by the standards by which we evaluate their solutions. The solution of a practical problem is a decision or judgment which

³That is, the social welfare, the common good, is the final end of political activity, but it can in turn be viewed as a means to the end of the happiness of the individual citizen. In other words, the welfare of the state is a condition of the happiness of its members.

is sound or unsound, wise or unwise, just or unjust, intelligent or unintelligent; the solution of a theoretical problem is a proposition which is either true or false or probable. It is wise or unwise to punish criminals; it is true or false or probable that criminals are reformed by punishment. Our immediate interest in the solution of a theoretical problem is to add to our knowledge; our immediate interest in the solution of a practical problem is not to acquire knowledge but to accomplish some other purpose.

That does not mean, of course, that there is no relation between practical and theoretical problems or between knowledge and practice; the fact is otherwise. Thus, the problem of the causation of criminal behavior is a theoretical problem raising questions as to the factors responsible for the occurrence of crime. In contrast, the problem of the treatment of offenders can be viewed as a practical problem raising questions as to the policies and methods to be employed in dealing with criminals and delinquents.⁴ Our primary interest in the solution of the theoretical problem of causation is to add to our knowledge; our primary interest in the solution of the practical problem of treatment is not to add to our knowledge but to accomplish some other purpose, such, for example, as the reformation of the offender. However, there is obviously a close dependence between what we can learn of the causes of crime and what we can do to treat its agents so as to reform them. Furthermore, knowledge of a sort can be gained through action. Practical programs often necessarily transcend existing knowledge and in that sense are experiments which within limits can contribute to knowledge.

It therefore becomes necessary for us to inquire into the utility of knowledge in the solution of a practical problem. It is important to remember that, as we have said, only a theoretical problem can be answered in terms of knowledge. Therefore, unless practical problems give rise to questions which can be answered in terms of knowledge, knowledge cannot contribute to

⁴It will be seen later that the treatment of offenders is also part of the theoretical problem of causation.

their solution. Indeed, there is no better way to discover the utility of knowledge in practice than to discover the theoretical aspects of practical problems. To the extent that these give rise to questions as to knowledge, knowledge can be utilized in practice, but no further.

Section 2. The Theoretical Aspects of Practical Problems.

We must again distinguish between ultimate and intermediate ends. An end is some value which we desire to achieve, and the choice of the final end to be attained by any activity always involves a choice among values. No amount of knowledge about crime and criminals will answer the question what *shall* be our ultimate objective in the treatment of offenders.⁵ Even were knowledge complete it would still be possible to choose one or another objective. We would still be able, for example, to say either that punishment or the protection of society shall be our ultimate end in the treatment of offenders. Were the question a theoretical question and were our knowledge complete, it would be possible to answer it in only one way; there would no longer be any problem.⁶

Questions as to intermediate ends stand on a different footing from questions as to ultimate ends. The former are questions

⁵This does not mean that knowledge cannot influence the choice of ends. The question what *ought* to be or what *should* be our final purpose in any activity is a theoretical question the answer to which would determine a rational choice of ends. But individuals need not and may not make rational solutions of their practical problems.

⁶We can ask, of course, what are the effects of punishment, and with knowledge of those effects we may decide that we will no longer punish offenders but will treat them by non-punitive methods. Superficially it might appear that our knowledge of the effects of punishment was thus determining our choice of the final end to be achieved by the treatment of offenders. However, upon a closer scrutiny it is apparent that this is not so. We are never interested in the effects of an ultimate end. As we have said, an ultimate end is a value which we desire to achieve for its own sake and not as a means to a more remote end. From this point of view to speak of the effects of a final end involves us in a contradiction, for it indicates that we are interested in something beyond what we have said was our final goal. It indicates, in a word, that what we have said was our ultimate end is only an intermediate end, as we shall show. The very fact that we are interested in the effects of punishment indicates that we regard it as an intermediate and not as an ultimate end, and that what we wish to know is whether by means of punishment we are accomplishing some other purpose. Our knowledge of the effects of treatment having shown us that we are not, we abandon punitive methods and employ some other means for attaining what is really our final purpose. Our choice is a choice of means and not

as to means. As we have said, a question as to means arises only when the question as to ends has been answered. A means, in other words, must be a means to some end. Our end having been determined, the question is what means shall we employ to achieve it. Again, we have a question which is not a theoretical question; it cannot be answered in terms of knowledge, although it presupposes knowledge. It presupposes knowledge that alternative methods exist of accomplishing the desired end, and it involves a choice among them, a choice which will be expressed in a decision to employ one rather than another method. Our choice among alternative means will be influenced by practical considerations; it is a matter of prudent judgment. We may choose one means rather than another because we believe it to be better adapted to accomplish the particular purpose which we wish to accomplish, or because, although we may believe it to be no better adapted or even less well adapted to that purpose than some other means, we believe that some other end which we also desire to achieve will thereby be promoted.

We may, for example, believe that punitive methods are less well adapted than non-punitive methods to the end of the reformation of offenders, and for that reason decide to employ non-punitive methods in the treatment of offenders. But we may desire not only to reform actual offenders, but also to deter potential offenders, and although we may believe non-punitive methods to be better adapted than punitive methods to the end of reformation, we may nevertheless decide to employ punitive methods because we believe them to be better adapted to the end of deterrence. As a practical problem, the question as to the means to be employed to achieve a particular end may therefore be either a question of the relative efficiency of various methods of accomplishing the same end or a question of the relative importance to us of that and other ends which we desire to accomplish.

The second of these questions cannot be answered by knowledge, nor can knowledge aid in its solution. We may know that the constitutional privilege against self-incrimination or the constitutional immunity from unreasonable searches and seizures

makes it more difficult to convict persons who are in fact guilty of crime, and to that extent renders the administration of the criminal law less efficient than it might otherwise be; and yet we may prefer a less efficient administration of the criminal law if we believe that by means of these constitutional provisions we can accomplish some other purpose which we hold dear. We may regard the sacrifice of one value as too great a price to pay for a more complete attainment of another.

But questions as to the efficiency of means are theoretical questions. By efficiency we mean nothing more than the adaptation of means to end. Efficiency is thus a matter of degree and it may range from absolute inefficiency to perfect efficiency. If a means is absolutely inefficient, it is not at all adapted to its end; if it is perfectly efficient, it is so well adapted to its end as to achieve it completely. The efficiency of any means can thus be measured only in relation to some end, and the measure of its efficiency is the extent to which it achieves that end. It is apparent that a number of questions can be asked regarding the adaptation of means to ends: Is there *any* means to a given end? Is *this* a means to a given end, that is, is *it* efficient to any degree? To what degree is it efficient? Is it more or less efficient than another means to the same end? By what means has a given end been accomplished? These are theoretical questions, capable of being answered in terms of knowledge, and the utility of such knowledge in practice needs no demonstration.

These questions are to be distinguished from other theoretical questions which can be asked regarding means and ends. Thus we can ask what *is* the end or what *are* the ends of any of our activities, such as the administration of the criminal law; and what is the *character* of the means, such as police and prosecutors and courts and prisons, which we employ in an effort to achieve those ends? These are questions which can be answered in terms of knowledge.⁷ So, too, is the question to what *extent* we are in

⁷These questions can be answered in terms of empirical knowledge. There is a further question, namely, what *should* be the ends of the criminal law, which is a theoretical question which cannot be answered in terms of empirical knowledge, but only in terms of rational knowledge.

fact achieving any of our ends, if our ends are of such a character that they can be observed and measured.

These questions are to be distinguished from questions regarding the adaptation of means to ends, in that the latter, unlike the former, cannot be answered solely by knowledge which is merely descriptive of means and ends. A question as to the adaptation of means to end is a question as to the relation of one event or thing to another, and knowledge of the existence and characteristics of events and things does not itself constitute knowledge of their relationships. If, for example, we are asked whether a given method of treatment is at all adapted or how well it is adapted to the end of reformation, we will not have answered that question if we merely describe the method of treatment, the offenders to whom it has been applied, and their subsequent conduct. Indeed, we will not have answered it although we go further and say that all of these offenders or some of them or none of them committed further crimes. The question would still remain whether their post-treatment behavior was to be explained by the method by which they were treated or in some other manner, and that question cannot be answered solely in terms of descriptive knowledge.

Section 3. The Utility of Knowledge in the Solution of Practical Problems.

It is of the nature of descriptive knowledge that it is always knowledge of particular events and things, of their existence and characteristics. Thus, knowledge of particular criminal activities, careers and organizations, of the psychological and physical characteristics of criminals, and of the characteristics of their environments, is descriptive knowledge. So, too, is knowledge of the characteristics of the instrumentalities, physical and human, and of the nature of the processes employed in the administration of the criminal law, of the number of crimes committed, arrests made, and prosecutions begun, and of the course and results of prosecutions. Case histories and police, judicial and penal records contain descriptive knowledge. Such knowledge may be of all degrees of accuracy and reliability, but how-

ever accurate and reliable, it is always knowledge of particular events and things, and never by itself knowledge of their relations to one another as means and ends.

There are two ways in which we can attempt to answer questions regarding the adaptation of means to ends. While descriptive knowledge will not itself answer such questions, both ways involve the interpretation of knowledge about particular events and things. We shall rather arbitrarily call these ways the way of common sense and the way of empirical science. We shall later distinguish at some length between these two procedures and the kinds of knowledge in which they respectively result. It is enough to say that common sense answers questions regarding the adaptation of means to ends by interpreting what it observes in terms of its experience of the world about us. But the descriptive knowledge which is employed in the development of an empirical science is interpreted not in terms of common sense generalizations of that character but rather in terms of the general propositions which constitute the theory of that science.

Common sense knowledge about the adaptation of means to ends is often adequate for our practical purposes. As we have pointed out, the first question that arises with respect to the adaptation of means to ends is whether there is any means to a given end. Common sense can often answer such a question with sufficient precision for our practical needs. If, for example, our end in the treatment of offenders is their incapacitation to commit further crimes in the community, we know that their removal from the community is a means perfectly adapted to that end. Common sense tells us that death and segregation are means well adapted to ridding a community of its criminals. Common sense also tells us that there are perfectly efficient ways of putting criminals to death and that certain types of imprisonment are highly efficient means of segregating criminals. And while we will not always know that there are such efficient means as these for accomplishing our purposes, we will often know that there are means which to some extent are adapted to our ends. Common sense will inform us, for example, that a policeman patrol-

ling a beat is a means to some degree adapted to the end of repressing crime. Common sense will also tell us, to take another example, that whenever our means for achieving any end consists wholly or in part of human beings, the more honest, intelligent, skilled and experienced they are, the more efficient our means is likely to be. And it should be plain that the more complete and precise our common sense knowledge of the factors in the situation which gives rise to our problem and of their relationships to one another, the more likely it is that we shall by common sense be able to contrive means which are efficient. But if all the methods which common sense enables us to devise prove to be absolutely inefficient, we cannot proceed further without additional knowledge except by trial and error.

We must, moreover, be constantly on our guard against the easy assumption, which common sense is all too ready to make, that such success as we appear to have in achieving any of our ends is to be attributed to the means which we have consciously employed. Frequently, in the absence of more precise knowledge than we can obtain in the common sense way, we cannot be sure whether we have accomplished our purpose by that means or by some other, of which we are unaware. This is especially true in cases in which we achieve only a partial success. We may have discovered, for example, that certain offenders whom we treated in a certain way thereafter desisted from crime, while others whom we treated in the same way, did not. In that situation it would certainly be unsafe to conclude that the method which we have employed was or was not adapted to the end of reformation. It may very well be that our apparent success or our apparent failure was not due to the method of treatment which we employed, but rather to other factors in the situation. It is often very difficult for common sense to say by what means we have accomplished our end.

As difficult as this problem is, there are still more difficult questions regarding the adaptation of means to ends. We may have tried a number of methods, say, of reforming actual offenders, and we may have apparently succeeded in accomplishing our

purpose to some extent by several of them. If we now desire to employ the most efficient of these methods, we have to know not only that each of them is in fact adapted to the end of reformation, but also their relative efficiency. Moreover, the ends which we have set ourselves and the means which we have contrived to achieve them in our efforts wisely to solve the practical problems of crime, are more often than not extremely complex. It is very seldom that we can accomplish even our immediate purposes by mechanical means, however elaborate, or by means which are predominantly mechanical. Usually our means even to a relatively simple end will consist of a complex of social institutions and human beings. And, finally, in order to achieve any of our more remote purposes, we will usually find it necessary to endeavor to attain a number of intermediate ends; we will usually have to employ a series of means in order to accomplish our more remote purpose. This is our situation in the administration of the criminal law. One of our more remote ends, although not our final end, in the enforcement of the criminal law is the conviction of criminals. In order to convict them we must detect their crimes and apprehend and prosecute them. To accomplish these less remote ends we employ all the elaborate machinery of criminal justice, a vast conglomerate of institutions and officials, of police departments, agencies of prosecution, juries and courts, and of policemen, prosecutors, judges and jurors.

It should be apparent that as practical problems become more complicated, common sense will find it increasingly difficult to answer questions regarding the adaptation of means to ends and, hence, will become less and less useful, although not always useless, in practice. Common sense will find it increasingly difficult to tell whether a given means is efficient to any degree, and even more difficult to say to what degree it is efficient. Common sense will find it increasingly difficult to obtain accurate and reliable descriptive knowledge, and even more difficult to interpret it in terms of common sense generalizations. We have, as we shall see, a great deal of descriptive knowledge about offenders and their characteristics and those of their environments, of the methods by which we treat them, and of their subsequent behavior. We

have interpreted these data and we have formed many opinions about the causes of criminal behavior and the efficacy of the various methods which we employ to reform offenders and otherwise to control and prevent criminal behavior. And yet the inadequacy of our knowledge to solve these problems is impressively revealed by the prevalence and extent of delinquent and criminal behavior.

Practical problems become more complicated as the situations from which they emerge and the phenomena with which they are concerned become more complex. As we have said, the efficient adaptation of means to ends is dependent upon knowledge of the relationships that obtain among particular events and things. As the situations from which practical problems issue and the phenomena with which they are concerned become more complex, these relationships become more numerous and intricate, and it becomes increasingly difficult to discover them by the only way which is open to common sense. It becomes increasingly difficult to contrive means for achieving our ends and to measure their efficiency. It becomes increasingly difficult, in brief, for common sense to solve practical problems. In such situations trial and error is the only course which is open to us, and that is often no more than a leap into the dark; we become more and more dependent upon chance for the attainment of our ends; our need for additional knowledge becomes more and more urgent.

During the course of this discussion the limits of the utility of common sense knowledge in the solution of the practical problems of crime will be more precisely indicated. We have already suggested that the utility of common sense knowledge in practice varies roughly with the degree of complexity of practical problems. It is only when we no longer have sufficient common sense knowledge to enable us to devise new means to our ends or to attempt to make old means more efficient, that we can say that common sense no longer has any practical utility.

Common sense knowledge having failed us, our only recourse is to trial and error unless we can obtain scientific knowledge. Questions regarding the adaptation of means to ends cannot be answered in terms of scientific knowledge, but it is sometimes

possible to convert them into questions which are capable of being answered in such terms. Means and ends are not categories of empirical science which, therefore, does not speak in terms of the *means-end* relationship. The only categories of empirical science which are at all analogous are cause and effect. We shall later explain what is meant by cause and effect as those terms are employed in empirical science. Here it is sufficient to say that as categories of empirical science they have a meaning which must not be confused with their meaning in popular usage. Whenever it is possible to state questions regarding the adaptation of means to ends in terms of causes and effects, they can be answered in terms of scientific knowledge or, at least, are susceptible to scientific investigation. When stated in those terms, theoretical questions involved in the means-end relationship reduce to two: What is the cause or causes of a given effect? What is the effect or effects of a given cause?

It should not be assumed, however, that means and cause and end and effect are synonymous terms. Imprisonment, for example, can be regarded as a means to the end of deterrence, but imprisonment and deterrence cannot be regarded as cause and effect, in the sense in which those terms are used in the empirical sciences. As categories of empirical science, causes and effects are known as variables; and the cause-effect relation is a certain very precise and invariant relation of variables. In order to state means and ends in terms of causes and effects it is always necessary by analysis to convert such terms as imprisonment and deterrence into variables. We shall subsequently explain the nature of variables;⁸ here we need say only that scientific knowledge of causes and effects is expressed in general propositions whose terms are variables.⁹ The difficulty which common sense experiences in answering questions regarding the adaptation of means to ends becomes increasingly great as phenomena become more complex and their possible relationships

⁸We can say here that a variable is a general or universal term, that is to say a term which never refers to a particular thing or to a definite aggregate of particular things. What are called 'causes' and 'effects' in common speech must not be confused with the scientific notion of the variable.

⁹In Chapter IV we explain what is involved in the process of acquiring knowledge of causes.

become more numerous and, hence, more intricate. As phenomena become more complex, it becomes increasingly difficult for common sense to observe them and to discover the significance of what it observes in terms of common experience. In many cases, it is possible to discover the relationships which we must know in order to answer questions regarding the adaptation of means to ends only if we can translate those questions into questions of causes and effects which can be answered in terms of scientific knowledge. The methods of empirical science are *par excellence* the methods of accurate and reliable observation and for the significant interpretation of the data of observation; and scientific knowledge is to be distinguished from common sense knowledge not only in that it is knowledge of causal relations but also by its greater accuracy, precision and comprehensiveness. Its utility in practice is a function of these qualities; and except in the simplest situations common sense knowledge cannot be as useful.

While procedures based upon common sense knowledge are less useful in practice than a technology based upon scientific knowledge, they are by reason of their greater certainty and sureness more useful than the process of trial and error, which rests not upon knowledge, common sense or scientific, but upon opinions. Scientific knowledge of causal relations enables the technologist to contrive means which are adapted to the ends to be attained. Common sense knowledge of causal relations, whenever it exists, is similarly although not equally useful. Procedures which are directed by common sense thus fall between true technology which is guided by scientific knowledge, on the one hand, and trial and error which is guided only by opinion, on the other.

In the following chapter we shall enumerate, analyze and classify what we conceive to be the fundamental practical problems of crime and attempt to discover their theoretical aspects. We shall also endeavor to indicate the kinds of knowledge which are required to answer the theoretical problems of crime. We shall then be prepared in succeeding chapters to survey existing knowledge in order to determine what knowledge is presently available for the solution of the problems of crime.

Chapter III

THE PROBLEMS OF CRIME

Section 1. The Ultimate Ends of Criminal Justice.

Since the criminal law is the formal cause of crime, since a crime is merely an instance of behavior which is prohibited by the criminal law, all of the problems of crime, practical and theoretical, have their roots in the criminal code.¹ Without a criminal code, there would be neither crime nor any problems of crime, however similar the problems which would survive its repeal might be. The criminal law consists of a large number of rules embodied in legislative enactments² and judicial decisions, the accumulation of the centuries during which the Anglo-American system of criminal jurisprudence has had its long, slow development. These rules declare in effect that the many and diverse kinds of behavior which they describe, usually in very general terms, are socially undesirable, cannot and will not be tolerated by society, and are therefore prohibited. This we may call the behavior content of the criminal law. The criminal law also provides, again quite generally, what shall be done with those persons who behave in the proscribed ways. They shall be put to death or deported or imprisoned or whipped or fined, and so on. This we may call the treatment content of the criminal law. The criminal law consists of propositions and exists in books.

It is obvious that the criminal law neither makes nor applies itself; it is made and enforced by men whom we call officials and who in one way or another have become society's representatives for those purposes. By criminal justice we shall mean nothing more pretentious than the administration of the criminal law as

¹By the criminal law we mean the substantive, as distinguished from the adjective or procedural, criminal law.

²By legislative enactments we mean both statutes and ordinances. We shall not find it necessary to distinguish between them.

it exists at a given time. Viewed most broadly, the administration of the criminal law consists in the application of its treatment content to those who violate its behavior content. The processes of criminal justice therefore include all official activities in the detection of crime, the pursuit, apprehension and prosecution of criminals, and their treatment. By the administration of the criminal law we can only mean the aggregate of the activities of officials in its enforcement. In this aspect, the criminal law is law in action.

The behavior content of the criminal law raises the question what behavior shall be made criminal; and the treatment content, the question what shall be done with those persons who commit crimes.³ These are fundamental among the practical problems of criminal justice, but they cannot be solved until the ultimate ends of criminal justice are determined. Making behavior criminal and treating offenders are merely means to ends. Whatever the ultimate ends of criminal justice may be, they are social judgments regarding the final purposes to be accomplished in dealing with crime and criminals by legal institutions and devices⁴ Unfortunately, these judgments have been nowhere authoritatively and explicitly declared. They must be gathered from the criminal law itself and from the literature of criminal justice.

The ultimate ends of existing systems of criminal law seem to reduce to two, to retributive justice and the protection of society.⁵ By retributive justice as an ultimate end we mean the

³These questions have for the time being been answered by the criminal law and they therefore resolve themselves into questions regarding changes in or alterations of the criminal code. A question regarding modification of an existing institution or procedure is a question of reform, which is always a practical question.

⁴Of course, we recognize that they may represent only the judgment of officials or of some smaller or larger but dominant social group. Nevertheless, they are in theory social judgments.

⁵It was unnecessary for our purposes to attempt, and we have not attempted, a very precise and exhaustive enumeration and analysis of the ultimate ends of criminal justice. One might, perhaps, add to retributive justice and the protection of society financial economy, the satisfaction of popular attitudes toward crime and criminals, the humanization of the modes of treatment, and even other ends. However, the humanization of treatment does not seem to be a final end of criminal justice. The end of humanization seems to presuppose punitive methods of treatment and to involve their amelioration. We inflict pain for its own sake but not so severely.

infliction of pain upon criminals as retaliation for their crimes.⁶ We shall refer to a system of criminal law whose ultimate end is retributive justice as a punitive system. By the protection of society as an ultimate end we mean the safeguarding of what are conceived to be vital social interests against behavior which is known or believed to be inimical to those interests.⁷

First, then, among the fundamental practical problems of criminal justice is the problem what the ultimate ends of criminal justice shall be.⁸ The solution of this problem involves a choice of the final values to be achieved by the administration of the criminal law. The criminal law as it exists at any given moment reflects our choice, but the problem, as we shall see, confronts us anew whenever a proposal is made to alter either the behavior or the treatment content of the criminal law. The theoretical aspects of this problem are what the ultimate ends of criminal justice *are* at a given time and what they *should* be at any time.⁹

The question is, therefore, how much pain shall we inflict, a question which, as we shall see, cannot be answered in terms of knowledge. The end of financial economy presupposes either a punitive or non-punitive system or a combination of the two. It does not affect the character of the system although it may influence our choice of methods of treatment. We may prefer less efficient methods because they are cheaper to administer. Financial economy therefore seems to be a tangential and not an ultimate end of criminal justice. In so far as a punitive system is, as has been said, a system of organized vengeance, the satisfaction of the desire for vengeance may be said to be the ultimate end of a punitive system.

⁶While pain may be inflicted upon criminals in a non-punitive system of criminal justice, it will not be inflicted for its own sake but as a means to the control of criminal behavior. A punitive system of justice has been called a system of organized vengeance. It is sometimes defended on the ground that by satisfying either a public or a private desire to be avenged upon criminals, public vengeance is substituted for private vengeance, and that this is in the interest of the public order. But it should be apparent that from this point of view pain is being inflicted upon criminals as a means for maintaining public order. Punishment from this point of view is not an ultimate end.

⁷We may endeavor to control criminal behavior by official or unofficial means, and of official devices criminal justice is only one, but it is the one with which we are immediately concerned. We shall later refer to other official devices and to unofficial devices for controlling criminal behavior.

⁸A system of criminal justice may, of course, have a number of ultimate ends. Both punishment and the protection of society seem to be ultimate ends of the Anglo-American system.

⁹In a subsequent discussion of the criminal law we shall revert to the problem of ultimate ends and we shall then further consider its theoretical aspects.

Section 2. What Behavior Shall Be Made Criminal.

The retributive and retaliative aim of criminal justice is probably the most primitive end of criminal justice. Whether or not the principle of *lex talionis* now lies at the basis of criminal justice, whether or not it is accurate to say that the primary interest of the criminal law is today retributive and punitive, there can be little doubt that retributive punishment is at least one of its ultimate ends. Retributive punishment proceeds upon the theory that the amount of suffering inflicted upon a criminal should somehow be proportionate to the enormity of his offense and to the public indignation which it arouses.

If, therefore, retributive punishment is to be the final purpose of criminal justice, the character of the behavior content of the criminal law will be determined by the capacity of behavior to arouse our indignation. The question what behavior shall be made criminal, will be answered in terms of our likes and dislikes. If our dislike for any conduct is sufficiently strong, we will make it criminal, and the seriousness or magnitude of the resulting crime can be measured only by the intensity of our dislike for that type of conduct. We may dislike behavior either because of what we know or believe to be its consequences or without regard to its consequences. It may not arouse our indignation although its results are detrimental to the common welfare, and, on the other hand, it may arouse our indignation although its consequences are not known or even believed to be inimical to the common good. It may be quite enough that behavior runs counter to strong and deep-seated prejudices. We may, for example, make the expression of certain ideas criminal because we do not like them. In a punitive system of criminal justice, therefore, the question what behavior shall be made criminal, seems to resolve itself into the question what behavior arouses our indignation.

The first question that arises in a non-punitive system of criminal justice is likewise what behavior shall be made criminal. Since the ultimate end of a non-punitive system is the defense of social interests against antisocial behavior, to answer that

question in such a system we have to determine, first, what are the social interests to be protected and, next, what behavior is incompatible with them. Dean Pound has very generally classified the numerous social interests which we now endeavor to protect by criminal justice as the general security, the security of social institutions, the general morals, the conservation of social resources, the general progress, and the individual life.¹⁰ Whether we agree with this classification or not, it is clear that whatever the social interests which we attempt to safeguard by criminal justice may be, they will represent values, and our determination of those interests will represent a choice among values. Thus, the question as to the social interests to be protected by criminal justice, like the problem of the ultimate ends of criminal justice, is a practical problem.¹¹

Having fixed upon the social interests which we desire to secure by criminal justice, the next question which confronts us in our effort to decide what behavior shall be made criminal, is what types of behavior are incompatible with those interests. Unless we know the consequences of behavior and their compatibility with what we conceive to be the common good, we may prohibit some behavior which is not socially undesirable and which, indeed, may be socially desirable; and we may fail to prohibit other conduct which is in fact antisocial.¹² Unless we have rather precise knowledge of the characteristics of those kinds of behavior which we wish to prohibit, we may not describe them in the criminal law with sufficient definiteness for our practical purposes. It must be remembered that the proscription of behavior is an intermediate and not a final end; it is a means as well as an end. Criminal laws are made to be enforced. They should describe the behavior which they prohibit with sufficient precision to insure both that they will be applied by the officials who administer them to the types of behavior at which they are directed, and that they will not be applied to similar but innocu-

¹⁰Criminal justice in America. New York Henry Holt & Co., 1930, p. 6

¹¹We shall later consider whether this problem has any theoretical aspects.

¹²Of course, the argument applies as well to existing, as to proposed, legislation. The existing criminal laws may be formulated in indefinite terms or they may be directed at behavior which is not socially deleterious.

ous forms of conduct.¹³ Ignorance of the nature of conduct which we wish to prohibit or the careless formulation of our prohibitions may defeat our purpose¹⁴

We do not mean to say that we shall always find it difficult to know the characteristics and consequences of behavior with sufficient precision for our practical purposes. The characteristics and at least the immediate consequences of many kinds of behavior are quite apparent; and, whatever their other consequences may be, it is clear that they are inimical to the common good, as we conceive it.¹⁵

In other cases the problem is not so simple. We can refer to the types of behavior which in common speech are known as racketeering and to those which in the language of the law are known as larceny, as examples of behavior whose characteristics it is difficult to know and describe with precision;¹⁶ and to traffic in intoxicating liquors as an example of conduct whose consequences it is difficult to ascertain and evaluate in terms of social interests.¹⁷ Social values are not entirely static and human behavior and its consequences take myriad shifting forms. There are fashions in criminal behavior, especially in that of the so-called professional or habitual criminals. Moreover, new non-criminal behavior patterns, some of which are quite obviously inconsistent

¹³One of the purposes of criminal justice seems to be the definition and delimitation of the authority of officials to interfere by the processes of criminal justice with the freedom of the individual to behave as he pleases. The individual is to be left free to act in any way which is not prohibited by the criminal law. Of course, the civil law may further limit his freedom of action. Lack of knowledge of the characteristics of behavior or careless drafting of legislation may result in giving officials an authority which it was never intended that they should possess, as well as in inefficient administration.

¹⁴This is only one example of how the criminal law may itself make for inefficiency in its enforcement. We shall subsequently refer to others.

¹⁵This is particularly true of the consequences and, to a less extent, of the characteristics, of some of the so-called common law felonies, that is, of the kinds of conduct which we call murder or rape or burglary or arson.

¹⁶In common speech racketeering is a name given to many forms of conduct; and one has only to refer to the maze of judicial precedents to see how many and what diverse kinds of behavior are given such names as homicide and larceny. Frequently the criminal law describes the behavior which it prohibits in very gross terms. The problem of drafting criminal legislation is obviously a very difficult and important practical problem to which we shall revert.

¹⁷To know this to be true, one has only to follow current discussions of the 18th Amendment and of the National Prohibition Act or, indeed, to read the Report on the Enforcement of the Prohibition Laws of the United States by the National Commission on Law Observance and Enforcement.

with the common welfare, develop with changes in the social and economic structure. It appears to be desirable that the behavior content of the criminal law should keep abreast of changes in behavior patterns or, at least, that it should not lag too far behind.

We do not mean to suggest that it is expedient that all behavior which is known to be incompatible with the common good be made criminal in a non-punitive system. A further question is involved, namely, whether the administration of the criminal law is likely to be an effective device for preventing such behavior, either alone or in connection with other preventive devices. It can operate as a preventive device only by reforming actual offenders and by deterring potential offenders. The question, therefore, is whether the persons who are behaving in a particular way which is regarded as inimical to the common good are likely to be deterred from behaving in that way if it is made criminal to do so.¹⁸ This is obviously a question as to the influence of the administration of the criminal law upon the behavior of actual and potential offenders, a problem which we are about to consider.

Nor do we mean to suggest that criminal laws are in fact enacted as the result of a consideration of social interests, of the compatibility of behavior with those interests, and of the probable efficiency of the criminal law as a device to prevent such behavior. We suggest only that a rational legislative technique in a non-punitive system would be based upon such considerations.

The theoretical aspects of the practical problem what behavior shall be made criminal are thus seen to be questions regarding the characteristics and consequences of behavior and the efficiency of the criminal law as a device to prevent behavior which is hostile to the common good.

¹⁸The behavior which is made criminal will usually be behavior which is already familiar in society. Rarely, if ever, does the criminal law prohibit a type of behavior of which there have not theretofore been frequent manifestations. And, of course, instead of making it criminal to behave in a certain way, we may make it criminal to fail to behave in a certain way. That is, we may employ the criminal law as a device either to prevent or to induce behavior. However, whether we do the one thing or the other, we are using the criminal law as a device for controlling behavior and both the practical and the theoretical problems which ensue, are largely the same. Therefore, we shall find it unnecessary to emphasize this distinction.

Section 3. How Shall Criminals Be Treated.

While the choice of methods of treating criminals, whatever the ultimate end of criminal justice, is always a practical problem, it seems impossible in a punitive system of criminal justice to formulate this problem in such a way as to admit of an answer in terms of knowledge. Although one can ask questions regarding the retributive or punitive efficacy of modes of treating criminals, such as whipping or imprisonment, there seems to be no way of answering them at the present time. There is now no way of discovering whether or not, or to what extent, a given mode of treatment is efficacious as a retributive device, whether or not, or to what extent, it satisfies the public's sense of justice and appeases public indignation. It seems equally impossible to discover the efficacy of a mode of treatment considered as a punitive device. There is now no way of measuring either the enormity of an offense or the amount of suffering inflicted upon a criminal by a given method of treatment. Until some way is discovered of measuring the magnitude of crimes, degrees of suffering, and the extent of public indignation, and of stating ratios between these measurements, questions as to the retributive and punitive efficacy of modes of treatment must remain unanswered.¹⁹

There is thus no presently available approach to the problem of the efficacy of a mode of treatment as a retaliative or punitive device. In so far as the infliction of pain gives rise to problems which can be made the subject of investigation, those problems are not defined by the retributive or punitive end. Thus, as a punitive device solitary confinement gives rise to no problem which admits of investigation by available techniques. It is only when it is considered in relation to such ends as prison discipline or the reformation of actual offenders and the deterrence of potential offenders that it gives rise to problems which are amenable to the research technique.²⁰

¹⁹The same means can be considered in relation to different ends. The infliction of pain can be considered not only as a means to the end of punishment, but also as a means to the end of the protection of society, and we shall so consider it presently.

²⁰Since the questions what behavior shall be made criminal and how criminals shall be treated in a punitive system of criminal justice are at the present time, at any rate, practical problems without any theoretical aspects, they are not problems to the solution of which knowledge can contribute. For that reason we shall not consider them further.

However, if the ultimate end of criminal justice is the protection of society, the case is different. While in this context the problem of the treatment of offenders is a practical problem, it also has theoretical aspects. Social interests are to be safeguarded against the consequences of criminal behavior by an effort to prevent crime, and the treatment of offenders thus becomes a means to the more proximate end of the control of criminal behavior.²¹ Criminal behavior is to be controlled by the incapacitation of the incorrigible offender to commit further crimes in the community, by the reformation of the corrigible offender, and by the deterrence of the potential offender. These, then, are the means to the ultimate end of a non-punitive system of criminal justice, but they are themselves ends, intermediate ends to which the various modes of treating offenders prescribed by the treatment content of the criminal law are necessarily the means. But a mode of treatment can be applied to an offender only as a result of the administration of the criminal law. The administration of the criminal law, the application of its treatment content to those who behave in the ways proscribed by its behavior content, is thus the means to the ends of incapacitation, reformation and deterrence. It is in this sense that criminal justice is a preventive device.²²

The practical problem of the treatment of offenders in a non-punitive system can now be more explicitly stated. The question is how shall alleged and actual offenders be treated if our purposes are to incapacitate and to reform actual offenders and to deter potential offenders. By incapacitation we mean that *as the result* of the method by which he is treated a criminal is to some degree incapacitated to commit further crimes in the community.²³ By reformation we mean that wholly or partly *as the result* of

²¹Since the advent of the theory and practice of the individualization of treatment, since the development of other ends of treatment than retribution and the employment of non-punitive methods of treatment, penology has become too narrow a term to embrace the theory and practice of treatment.

²²The efficiency of the administration of the criminal law as a preventive device is obviously to be measured in terms of the extent to which it accomplishes the ends of incapacitation, reformation and deterrence.

²³He may still be able to commit crimes in prison, as witness the recent prison riots. How to incapacitate him to commit crimes in prison is another problem, a problem of prison administration.

the method by which he is treated, a criminal commits no further crimes. If he does commit further crimes, he is a recidivist.²⁴ By deterrence we mean that wholly or partly *as the result* of the methods by which alleged and actual offenders are treated, potential criminals refrain from criminal behavior.²⁵ The theoretical aspects of the problem of treatment are therefore questions regarding the adaptation of methods of treatment to the ends of incapacitation, reformation and deterrence.

It is obvious that a method of treatment will be a means to reformation or deterrence only in so far as it exerts some influence upon the behavior of actual and potential offenders. It is a commonplace that the factors which enter into human behavior, criminal as well as non-criminal, are positive and negative.²⁶ The positive factors are those which incite to action and the negative factors, those which tend to inhibit action. Negative or inhibiting factors thus tend to counteract the positive or inciting factors, and both positive and negative factors are found in the causal background of any instance of behavior. In any inquiry into the causal background of criminal behavior both positive and negative factors must, therefore, be taken into account. We can thus say that any characteristic of a person or of his environment, whether it be a mental defect or disorder, poverty, alcoholism, or a broken home, which activates him toward criminal behavior, is a positive factor. In the same way any factor, whether it be the home, a recreational institution, the school, or the police, which tends to restrain an individual from crime, is a negative factor.

Any method of treating offenders may operate as a causal influence in their subsequent behavior or that of other persons. It may operate either as a positive factor or as a negative factor; it may either incite toward or restrain from crime. The problem

²⁴That does not mean, of course, that his recidivism is the result in whole or in part of the methods by which he was treated.

²⁵Except when they happen to be alleged offenders, potential offenders do not suffer treatment. From this point of view the deterrence of potential offenders as the result of the administration of the criminal law is to be regarded as one of its by-products.

²⁶The analysis which follows must be taken as a common sense analysis of the problem of causation. It is impossible, as we shall see, to analyze it at the present time except

of treatment is thus in one aspect merely a phase of the more general problem of the causes of criminal behavior, and in another aspect merely a phase of the more general problem of the prevention of crime. Indeed, in a very real sense there is only one problem, the problem of causation. We shall nevertheless find it convenient to consider these problems separately, and to reserve the term preventive measures for other means, official and non-official, of controlling criminal behavior than the administration of the criminal law.

In view of the relationship among the problem of the causes of crime, the problem of the prevention of crime and the problem of the treatment of offenders, it should be plain that knowledge of the causes of crime can be applied in the practical activities of treatment and prevention. Indeed, if the immediate ends of treatment are reformation and deterrence, methods of treatment must be based upon knowledge of causes if they are to achieve their purpose otherwise than fortuitously. Similarly, it is only by the application of such knowledge that, except by chance, preventive measures can have any efficacy, since prevention is merely the process of controlling causes in order to control effects.²⁷ The problem of causation is thus fundamental among the problems of crime if it is our purpose to control criminal behavior. It is fundamental in the sense that the solution of the problems of treatment and prevention is conditioned upon its prior solution. These three problems may be said to be problems in criminal behavior since they focus upon the causes of the past conduct and the means of controlling the future conduct of actual and potential offenders.

The problem of causes is, of course, a theoretical problem, and the theoretical aspects of the problem of treatment can now be seen to be phases of the problem of causes. Deterrence may be

²⁷However, it is neither necessary nor practicable that the formulation and execution of programs of treatment and prevention wait upon complete knowledge of causes. Attempts to solve practical problems as insistent as these cannot be deferred until knowledge is perfected. Whatever knowledge is available at the moment, must be applied with pragmatic skill. It is for that reason that current programs of treatment and prevention are an index of what in general is known or believed to be known regarding the causes of crime. We shall revert to these matters in Chapter VIII.

regarded as the balance of positive and negative influences upon the behavior of potential offenders. A potential offender will be deterred from crime if the factors, including methods of treating actual offenders, which restrain him from, predominate over those which incite him to, criminal conduct, and *vice versa*. Reformation, like deterrence, is the result of inciting and inhibiting forces, including methods of treatment. When the positive forces predominate, what is commonly called recidivism occurs; when the negative influences prevail, reformation occurs. Thus the determination of the reformatory or deterrent efficiency of any method of treatment depends upon an analysis which will reveal and isolate its positive and negative influences upon the behavior of actual and potential offenders.²⁸

The problem of treatment has further theoretical aspects. The first is what *are* the methods of treating offenders. A mode of treatment is usually a very complex institution. While terms such as imprisonment, probation and parole, are useful as indicating *modes* of treatment, they tend to conceal the complexities of *methods* of treatment, which are always variations of institutionalized forms of treatment. Imprisonment, for example, is a mode of treatment which is composed of many elements which may vary almost infinitely. While the criminal law prescribes the modes of post-conviction treatment and the code of criminal procedure prescribes many of the modes of pre-conviction treatment, they do so only within the range of administrative flexibility. The trend in legislation is toward grants of wide discretion to officials with respect to the details of treatment. Moreover, the methods of treatment actually employed are often decidedly different from those which are authorized. In other cases, there are gaps in the procedural code which have been filled by the customary practices of officials. It is clear that if we are to know what the methods of treatment actually are, we must observe the behavior of officials.

²⁸To speak of methods of treatment, is to speak of the practices of officials in the treatment of offenders. Questions regarding the reformatory and deterrent efficiency of methods of treatment are thus questions regarding the influence of the behavior of officials upon the behavior of actual and potential offenders. These, as we have said, are problems in criminal behavior.

Questions concerning the characteristics of methods of treatment call for information regarding the nature and operation of a method of treatment considered more or less in isolation. These questions extend to all the elements which compose a method of treatment regarded as an institution. In the case of imprisonment, for example, they call for information regarding the prison buildings and equipment, the prison functionaries, the number and character of the prison inmates, and such aspects of prison life as discipline, diet, health, education, labor and recreation.

The theoretical aspects of the problem of treatment are thus questions regarding the characteristics and the efficiency of methods of treatment.

Section 4. The Problem of Crime Prevention.

By preventive measures, as we have said, we mean both official and non-official efforts, other than the administration of the criminal law, for controlling criminal behavior. The problem of crime prevention is thus not a problem of criminal justice, although its functionaries, such as the police, may sometimes engage in preventive activities. When engaged in such activities, they are not engaged in enforcing the criminal law; and their efforts to prevent crime do not differ in essence from those of the social-worker or the teacher or the clergyman or any other agency of crime control.²⁹

The end of preventive measures may be either the elimination or the reduction of criminal behavior, but they are usually directed toward its reduction rather than its elimination. Whether the elimination of all crime is an end which can ever be achieved is a question to which we shall recur. Efforts to reduce crime may be directed toward a diminution of the total volume of crime or the reduction of the volume of specific crimes. In the latter case the limit of reduction is elimination, and the

By the latter term

This is a method of crime prevention analogous to the incapacitation of offenders not to change the behavior patterns of actual or potential

elimination of a specific crime may be more feasible than the elimination of all crime. Whether we shall make any effort at all to prevent crime and, if so, whether our end shall be the elimination or the reduction of crime, are practical problems. So, too, is the question what means we shall employ to control crime. This question obviously has theoretical aspects.

Since the criminal law is the formal cause of crime, the volume of crime can easily be reduced by the simple expedient of modifying the criminal code. The repeal of any rule of criminal law deprives the behavior which it formerly prohibited of its criminal character. The kind of behavior which it described may persist, but the crime will not. However, it is possible to try to prevent crime by endeavoring to change the behavior patterns of actual and potential offenders. Preventive efforts of this sort, as we have said, are attempts to control the causes of crime either by the eradication of the factors which are believed to incite toward crime or by increasing the resistance of those who are exposed to such factors.

The theoretical aspects of the problem of prevention are questions regarding the characteristics and the efficiency of preventive programs and measures.

Section 5. The Administrative Problems of Criminal Justice.

Having considered those problems of criminal justice which are problems in criminal behavior, we now turn to those which we shall call administrative problems. We have said that problems in criminal behavior focus upon the causes and the means of controlling crime. If the processes of criminal justice are viewed as means to the ends of reformation and deterrence, they give rise to problems in criminal behavior. But if these processes are, without regard to their influence upon the behavior of actual and potential offenders, viewed in relation to any other end of criminal justice, they give rise to administrative problems. Thus, methods of treatment give rise to administrative problems when considered, without regard to their reformatory or deterrent effects, in relation to such ends as punishment, incapacitation, financial

economy, and so on. Administrative problems thus focus upon all other ends of criminal justice than reformation and deterrence.

It is important to repeat in this connection that a means may be considered in relation to different ends; and this is true of the processes of criminal justice. For example, the efficiency of any method of treatment may be measured either by its effects upon the behavior of actual and potential offenders, or in such terms as its financial cost, security against escape, and the convenience, comfort and welfare of officials and offenders. Moreover, the efficiency of each of the elements in a method of treatment may be similarly measured. Trends in imprisonment such as the classification and segregation of offenders, the individualization of treatment within the several classes, the specialization of prisons, the development of prison social life, discontinuous imprisonment and preventive detention, and elements in imprisonment such as the type of prison, its location, the characteristics of the prison functionaries, the prison diet, the medical care of prisoners, and the character of their discipline, labor, recreation and education,—each of these may be considered either in relation to the ends of reformation and deterrence or in relation to such other purposes as they may have.

Moreover, a means may be highly efficient in relation to one end and extremely inefficient in relation to another. The theoretical aspects of administrative problems are questions of administrative efficiency, but it cannot be too strongly emphasized that these questions are meaningless until the administrative ends of criminal justice are clearly and unambiguously defined.⁸⁰ These ends are always intermediate and never ultimate ends, which is only to say that the administration of the criminal law is itself a means to more remote ends.

The administration of the criminal law can be viewed as a single process.⁸¹ We have observed that the immediate end of

⁸⁰It is, for example, a meaningless question to ask if the police are efficient or the grand jury is efficient or the prosecution of offenders is efficient, unless we are told in relation to what end the question is asked.

⁸¹So viewed its efficiency can be considered in relation to its ultimate as well as its immediate ends. Thus, if its ultimate end is the punishment of all persons who

the administration of the criminal law is the application of its treatment content to those who violate its behavior content.⁸² From this point of view, the efficiency of criminal justice is to be measured by the extent to which persons who commit crimes are subjected to treatment. But in order adequately to express the immediate end of criminal justice as it is commonly conceived, it must be stated as the severe, uniform, certain and speedy treatment of criminals. From this point of view, the efficiency of criminal justice is to be measured by the extent to which it results in the severe, uniform, certain and speedy treatment of persons who commit crimes.

The administration of the criminal law can also be viewed as consisting of the processes of criminal justice which precede, and of those which follow, conviction. As we have pointed out, before an alleged criminal can be treated as an actual criminal, whether by punitive or non-punitive methods, his criminality must be officially established by the processes of criminal justice; he can be lawfully treated in one of the ways prescribed by the treatment content of the criminal law only after his guilt of the crime with which he is charged has been officially determined, that is, after his conviction.⁸³ The pre-conviction processes of criminal justice thus terminate in the conviction or the acquittal of persons accused of crime.⁸⁴ The post-conviction processes begin after conviction and consist in the official determination of the modes by which actual criminals are to be treated, and their treatment according to

commit crimes, it is efficient to the degree that it achieves that purpose; if its ultimate end is the protection of society by the control of criminal behavior, it is efficient to the degree that it prevents crime.

⁸²Thus are actual offenders to be punished, incapacitated and reformed, and thus are potential offenders to be deterred.

⁸³By conviction we mean not only conviction as the result of a trial in which the accused pleads not guilty but also as the result of a plea of guilty. Of course, in some cases the accused may be convicted of a lesser or different crime from that with which he was originally charged, but that fact is unimportant for our present purposes. By acquittal we mean any termination of a prosecution other than conviction.

⁸⁴Of course, crimes may not be detected and, if detected, their perpetrators may not be discovered or prosecuted.

those modes.³⁵ The post-conviction processes of criminal justice thus end in the death of the criminal or his unconditional return to society.³⁶

Treatment, in a word, must be preceded by conviction.³⁷ The immediate end of the pre-conviction processes of criminal justice, viewed as a whole, is thus the conviction of all persons who have committed crimes; and their efficiency is to be measured by the extent to which they accomplish that purpose. But these processes have another end, the acquittal of alleged offenders who have not in fact committed the crimes with which they are charged; and they are, therefore, not entirely efficient unless all guilty persons are convicted and unless every innocent person is acquitted.³⁸

Just as treatment must be preceded by conviction, so conviction must be preceded by the detection of the crimes which are committed, the apprehension of the persons who committed them,

³⁵The initial determination of the method by which a convict is to be treated is made by the judge and is expressed in the 'sentence'. Frequently he will have no or little discretion with regard to the method of treatment to be employed. Sometimes other officials, such as parole boards, may have the power to vary somewhat the mode of treatment prescribed by the judge.

³⁶He may be executed or die a natural death while being treated. If he is sentenced to life imprisonment and his sentence is not altered, he will, of course, die in prison. His return to society may in the first instance be conditional, as where he is placed on parole or on probation, but sooner or later he will be unconditionally discharged.

³⁷Although an accused is convicted in the trial court, his conviction may be set aside by an appellate court and he may be acquitted either by the appellate court or as the result of another trial. By conviction we mean what the lawyers call a final judgment from which no appeal can be taken. Of course, the convict may subsequently be pardoned, but that is a different matter. The appeal is therefore one of the pre-conviction processes of criminal justice; the pardon is one of the post-conviction processes.

³⁸We shall see that although we lack precise knowledge we have excellent reasons for believing that some innocent persons are convicted (see E. M. Borchard, *Convicting the innocent*. New Haven: Yale University Press, 1932.) and that only a comparatively small proportion of the persons who commit crimes are convicted. However, it may be doubted that it is either socially desirable or in fact desired by society that criminal justice should result in the prosecution, conviction and treatment of all persons who commit crimes. The resulting social problems might be as perplexing and as serious as the problems of crime with which we are now confronted. Apparently, society is willing that officials should exercise some discretion with respect to the criminal laws that are to be chosen for enforcement. There is a curious paradox here. We are willing to tolerate some kinds of criminal behavior (adultery, for example, in many jurisdictions), but we are not willing that it should not have attached to it the stigma of criminality. Apparently, it is enough to conserve the public welfare that such behavior should be made criminal, and of no consequence that such behavior occurs on however large a scale.

and their prosecution. The pre-conviction processes of criminal justice thus consist of those which are involved in the detection of crimes and the apprehension of their perpetrators, and of those which are involved in establishing the guilt or innocence of persons accused of crime. The efficiency of these processes is, of course, to be measured by the extent to which they respectively achieve their proximate ends.

Thus if the proximate ends of the processes of detection and apprehension are the discovery of all crimes and the identification and arrest of all criminals, and if the proximate ends of the processes of prosecution are the conviction of the guilty and the acquittal of the innocent, their efficiency is to be measured in those terms. But there are other measures of the efficiency of pre-conviction processes, which is to say that they have still other ends. Their efficiency can be measured, for example, in terms of the certainty and celerity with which crimes are discovered and criminals are identified, arrested and prosecuted.

The post-conviction processes of criminal justice consist chiefly, as we have said, of the official determination of the modes by which criminals are to be treated after conviction and their treatment according to those modes.³⁹ The efficiency of these processes, viewed as a whole, can be considered in relation to such ends as punishment, incapacitation, reformation and deterrence,⁴⁰ but their more immediate end is the application of the treatment content of the criminal law to convicts,⁴¹ and their efficiency in

³⁹The judge, as we have said, makes this determination in the first instance and embodies it in the sentence. In a particular case he may or may not have a choice among a number of alternative modes. He may sentence the criminal to death, to imprisonment, to a money fine, and so on. He may suspend sentence or place the criminal upon probation. His determination is only an initial one, and may in some cases be subsequently varied by commutation of his sentence or by parole, and so on. And, of course, the criminal may be pardoned or may escape and thus be relieved of treatment entirely or in part. But unless he is pardoned or escapes, he will be subjected to some mode of post-conviction treatment, either that fixed by the judge or some other.

⁴⁰The problems involved in measuring the efficiency of post-conviction processes in relation to these ends do not differ from those involved in determining the efficiency of criminal justice in relation to the same ends, and, therefore, we need not consider them further.

⁴¹From this point of view we are not concerned with the results but only with the fact of treatment. Such other immediate ends as post-conviction processes may have are less well defined, but it is possible to consider their efficiency in relation to

that respect is to be measured either by the number of convicts who are subjected to post-conviction treatment,⁴² or by the proportion of convicts who escape from official custody.

The efficiency of each post-conviction process can be considered in turn. In cases in which officials have a choice among modes of treatment, the efficiency of the process of determining by what modes particular convicts are to be treated is to be measured by their probable punitive, incapacitating and reformatory efficacy when applied to those convicts, according as the purpose of treatment is to punish or to incapacitate or to reform them.⁴³

The efficiency of the process by which the modes of treatment fixed for particular convicts is applied to them, can be considered in relation to a number of ends. Here it is important again to emphasize the distinction between a mode and a method of treatment. As we have said, modes of post-conviction treatment are prescribed by the criminal law in very general terms. Within the broad and vague limits of these modes officials are given a wide discretion as to the methods by which they shall be applied.⁴⁴ The result is that there may be many methods of applying the

their financial cost, the mental and physical health of convicts when they are finally released from official custody, the value of the products of the labor of convicts, and so on.

⁴²Of course, the mode of treatment applied to any convict should be that prescribed by law or, if the law provides alternative modes, that selected by the judge or other official having the power to make the choice. In making this computation, allowances must be made for pardons. Treatment will usually follow certainly and quickly upon conviction. However, if certainty and celerity are ends of post-conviction processes, the problems involved in determining their efficiency in relation to those ends are of the same character as those involved in measuring the efficiency of pre-conviction processes in relation to the same ends.

⁴³This, of course, is what lies back of proposals that judges should consult psychiatrists before sentencing felons or that the sentencing power should be vested in an administrative board at least some of whose members would be psychiatrists or sociologists. The end of treatment is taken to be reformation, and it is assumed that these experts know by what modes of treatment convicts can be reformed or, at any rate, that their opinions about such matters are better than those of the judges, no matter how experienced and wise the latter may be. *Sed quare.*

⁴⁴The modes prescribed by the criminal law are often made more definite by the character of the physical and other facilities which are provided for post-conviction treatment such, for example, as the penal and correctional institutions, and by the provisions of laws, which we shall collectively call the administrative code. Nevertheless, the fact remains that the functionaries of treatment have it in their power to make a given mode of treatment mean many different things as applied to different convicts in the same or different jurisdictions.

same mode of treatment.⁴⁵ To speak of the efficiency of the process by which modes of treatment are applied to particular convicts, is therefore to speak of the efficiency of methods of treatment. We have already considered the efficiency of methods of treatment in relation to ends of punishment, incapacitation, reformation and deterrence. Their efficiency may also be considered in relation to various administrative ends such as prison discipline, the health and education of convicts, the productivity of their labor, and so on.⁴⁶

It is quite clear that the efficiency of criminal justice, considered as a single process, is a function of the efficiency of each of the processes of which it is composed. That is also true of any process of criminal justice which is itself made up of a number of processes.⁴⁷ It is also evident that the efficiency of every process of criminal justice is conditioned in part by that of the processes which precede it.⁴⁸ Obviously, knowledge of the efficiency of criminal justice is not necessarily knowledge of the efficiency of the various processes of which it is composed.

Moreover, knowledge, however precise, of the extent to which we are achieving our end, is not itself knowledge of the efficiency of any of the means which we are consciously employing for that purpose. We may be achieving our end by some other means of

⁴⁵In so far as the functionaries of treatment have a choice of methods by which a particular mode of treatment can be applied, they should, of course, employ the method most likely to accomplish the immediate end of that mode of treatment. But it is sometimes very difficult for them to know what the end is; as we have pointed out, neither the ultimate nor immediate ends of treatment have been clearly defined. Moreover, as we have also pointed out, the discretion of the officials by whom the treatment process is executed is limited by the character of the physical and other facilities with which they are provided, and by the administrative code. Nevertheless, they do have considerable discretion, as we realize most clearly when we happen to get an Osborne or a Kirchwey, for example, as a prison warden. When they come to exercise this discretion in such a way as to adapt methods of treatment to the end of reformation, they find themselves hampered not only by the predominantly punitive character of our system and the facilities with which they are provided but, most important of all, by the lack of knowledge as to how criminals can be reformed.

⁴⁶The difficulties here are in determining what are the administrative ends of treatment and in the measurement of the results of treatment.

⁴⁷Thus in felony cases the processes of prosecution include the preliminary hearing, the indictment or accusation, the trial and the appeal.

⁴⁸Thus criminals cannot be identified unless crimes are discovered, or apprehended unless they are identified, or prosecuted unless they are apprehended, or treated unless they are convicted.

which we are not aware.⁴⁹ Furthermore, if we say that inefficiency is any degree of efficiency less than perfect efficiency,⁵⁰ to know that any of the more complex processes of criminal justice is inefficient, is not necessarily to know at what points it is inefficient or what factors are responsible for its inefficiency.⁵¹ But we must have such knowledge if we would contrive more efficient means for achieving our ends.

The processes of criminal justice are established by a body of laws which, taken together, we shall call the administrative code.⁵² The administrative code also creates the institutions, such as police departments and parole boards, the offices of sheriff, prosecutors and prison administrators, by which these processes are executed; and provides for their organization, personnel and equipment. The administrative code also prescribes the duties of officials. However, the provisions of the administrative code are couched in terms of greater or less generality. Within the limits of the institutionalized forms which official behavior is required to take, officials are left with a considerable discretion as to the manner in which they shall exercise their powers and perform their duties. The result is that the institutions of criminal justice can be organized and administered, the processes of criminal justice can be executed and the duties of officials can be performed, in different ways. Moreover, the administrative code is

⁴⁹We can often be sure that in so far as we achieve the administrative ends of criminal justice, we do so by the means which we employ. There are often no other means by which we could have achieved them. To the extent that prosecution results in indictments, it must be by means of the grand jury.

⁵⁰It is a question, of course, whether we can ever hope to attain or whether we desire to attain perfect efficiency in the administration of criminal justice. If we are trying for, or are satisfied with, something less than perfect efficiency, our means are inefficient only if they are less efficient than we wish them to be.

⁵¹Although we know that prosecution results in the conviction of only a small proportion of all persons who commit crimes, we may not know whether or to what extent its inefficiency is to be attributed to the processes of detection and apprehension or to the processes of prosecution.

⁵²The administrative code is to be distinguished from the substantive criminal law. It consists, first, of the laws by which what may be called the machinery of criminal justice is established, viz., police departments, the agencies of prosecution, the courts, the penal and correctional institutions and the other agencies of treatment, and their jurisdiction and powers defined. It consists, second, of the laws, such as the rules of criminal procedure, practice and evidence, which are designed to govern and regulate the agencies and processes of criminal justice and to instruct officials regarding their behavior in the administration of the criminal law.

neither a complete set of rules for the regulation of the processes of criminal justice nor a complete set of instructions for the officials charged with the enforcement of the criminal law. The gaps in the administrative code have been filled by forms of official behavior which have developed in the customary practices of officials. Some of these practices are lawful although not prescribed by the administrative code;⁵³ others are unlawful.⁵⁴

Thus, while the administrative code prescribes, it does not describe, either the processes or the institutions of criminal justice as they exist in fact. As the result of the generality and incompleteness of the administrative code and of differences in the organization, personnel and equipment of the institutions by which the processes of criminal justice are executed, varieties of these processes are to be discovered in different jurisdictions and even in the same jurisdiction at different times and places. If we would know what are the characteristics of the institutions of criminal justice or how the criminal law is administered by them, we must go beyond the administrative code and seek empirical knowledge. We must observe these institutions as they are, and the criminal law in action.

We are interested in knowing what the processes and institutions of criminal justice are in fact, because without such knowledge we cannot account for the inefficiency of criminal justice. The processes of criminal justice are the means by which we seek to attain the ends of criminal justice. The problem of increasing the efficiency of the administration of the criminal law is, therefore, the problem of the better adaptation of these processes to their ends. But in order to increase their efficiency, we must know the causes of their inefficiency. We must seek these causes in the nature of existing processes, the character of the organization, personnel and equipment of the institutions by which they are ad-

⁵³Such, for example, as the practices of the police in criminal investigations, of prosecutors in the preparation of their cases for trial, and of prison wardens in the administration of penal institutions; the acceptance by prosecutors of pleas of guilty to less serious offenses than those charged; and the choice by police and prosecutors of the parts of the behavior content of the criminal law which they will endeavor to enforce.

⁵⁴Such, for example, as certain forms of the third degree, unreasonable searches and seizures, and excessive bail.

ministered, and in those factors in the environments in which these institutions exist, which may influence the manner in which they function, such as social attitudes and the pressure of political and criminal organizations.

It is clear that the major theoretical problems growing out of the administration of the criminal law are questions as to the content of the administrative code, as to the characteristics of the institutions of criminal justice and of the social milieus in which they exist, and as to the characteristics and efficiency of the processes of criminal justice.

Section 6. The Problems of the Criminal Law.

All of the problems which we have been discussing have their roots, as we have said, in the criminal law, and many of them may be said to be problems of the criminal law.

The theoretical problems of the criminal law are of two sorts. They consist, in the first place, of such questions as what should be the ultimate end of the criminal law, what behavior should be made criminal, how criminals should be treated. They consist, in the second place, of such questions as what have been and what are the ultimate ends of the criminal law, what behavior has been and is made criminal, how criminals have been treated and how they are treated. The first group of questions is answered in terms of an examination of the criminal law in the light of the rational sciences of ethics and politics. The second group of questions is answered by a study of the criminal law itself. This study may take the form either of a history of the criminal law, or of a comparative analysis of the criminal codes of various countries, or of a science of the subject matter of the criminal law. A science of the criminal law would, of course, be a rational and not an empirical science. We shall subsequently distinguish between rational and empirical sciences; it is here sufficient to point out that the law, of which the criminal law is only one branch, is the kind of subject matter which is capable of rational study. Whereas theoretical questions about the administration of the criminal law can be answered in terms of empirical knowledge, theoretical

questions about the nature and content of the criminal law must be answered by rational knowledge.

The practical problems of the criminal law are the problems which its various practitioners must solve, the problems of the legislator, the judge and the lawyer. As we shall see, a rational solution of these practical problems depends upon knowledge which answers the theoretical questions above enumerated. We shall be primarily concerned with the legislator's problems, such as what behavior shall be made criminal and how criminals shall be treated; and secondarily with the questions which the judge must answer in order to decide particular cases.

PART TWO

CRIMINOLOGY

Chapter IV

THE CONDITIONS OF A SCIENCE OF CRIMINOLOGY

Section 1. An Evaluation of the Results of Criminological Research.

In order to evaluate the results of criminological research, it is necessary to indicate the boundaries of the field of inquiry which we shall treat as criminology. Criminology can be said to be the study of the phenomena of crime and of related phenomena. Such a statement, however, is too indefinitely broad; it can be made to include much or little, according as different criteria are employed for judging the relatedness of various phenomena to crime. We shall therefore find it more useful to define criminology by undertaking a brief summary of the kinds of knowledge to be found in the literature of criminology.

(1) Criminologists have given us knowledge of criminal activities and organizations. This knowledge has taken the form of narrative reports of the activities of individuals or groups of individuals. In its narrative form it resembles the kind of knowledge to be found in biographies. It is important to note here that this knowledge is never quantitative. Narrative reports of the activities of various individual criminals or criminal groups can be compiled only in the sense that they can be summarized. Such a summary will, for example, describe the characteristics of gangs, the ways in which they are formed, and the character of their activities.

(2) Criminologists have given us knowledge of the characteristics of individual criminals. This knowledge has taken one of two forms. It is either non-quantitative or quantitative. In its

non-quantitative form, it consists in the report of individual case histories and in the summary of them by some type of diagnostic characterization. Non-quantitative studies of criminal natures are distinguishable from non-quantitative narrative accounts of the activities of criminals only in so far as they result in attempts to classify criminals with respect to one or more characteristics which they are somehow found to possess. In its quantitative form, this knowledge tells us how many criminals of given groups possess a certain trait, or the degree to which a given trait is found to be present in some sampling of the criminal population. The trait in question may be such that its presence or absence can be noted, and the number of instances in which it is present counted. On the other hand, the trait may be such that the degree to which it is present can be measured. In both cases this kind of knowledge gives us a quantitatively expressed description either of some individual criminal or of some definite aggregate of criminals.

(3) Criminologists have given us knowledge of the environments from which criminals come. This knowledge is also either non-quantitative or quantitative in form. In its non-quantitative form, it consists in the characterization of the environmental backgrounds of criminals. The materials for such studies are found in the case histories of individuals, just as materials for the non-quantitative description and classification of criminals are found in their case histories. Different types of environmental background can be classified according as they possess different traits or are constituted by different elements. In its quantitative form, this knowledge either states the number of criminals who are found to have a certain environmental background or measures the degree to which a certain type of environmental background is a common element in the biographies of a group of criminals. Just as in the case of the quantitative study of criminal characteristics, criminal environments can be counted according as they possess or do not possess a certain trait, or the degree to which a certain trait is found to be present in an environment can be measured. In both cases this knowledge gives us quantitative descriptions of the environments of criminals.

(4) Criminologists have given us knowledge of the ways in which criminals are treated, of the procedures by which they are apprehended, detained, prosecuted, tried and treated subsequent to conviction. Knowledge of the treatment of a criminal is of course knowledge of the criminal's environment. This knowledge is also found in non-quantitative and quantitative forms. In its non-quantitative form, it consists in a description of the various institutions and procedures which constitute both the official and the non-official techniques and devices of society for coping with the phenomena of crime. These institutions and procedures can be classified by reference to the characteristics which they are found to possess. In its quantitative form, this knowledge gives either the number of institutions or procedures of various types or the number of individuals who are treated by, or in some way come into contact with, these institutions or procedures, or it measures the degree to which a given institution or a given procedure possesses a certain trait. This quantitative study of methods of both pre-conviction and post-conviction treatment, and of both official and non-official treatment, is a special case of the quantitative study of the environmental background of criminals.

We shall report the content of much of this knowledge in great detail in three subsequent chapters. For the present we are interested in evaluating the field of knowledge which we have just summarized.

For convenience we shall arbitrarily call this body of knowledge 'criminology'.

In the light of the foregoing discussion, it can be said that criminology consists of information about the activities and natures of criminals, their environments, and the ways in which they are officially and unofficially treated by social agents and agencies. In any case the information is either quantitative or non-quantitative. A body of knowledge as knowledge is evaluated with respect to its validity and to its significance.¹ We shall consider the questions of validity and significance separately.

¹By validity we mean accuracy and reliability. By significance we mean susceptibility to systematic interpretation; we do not mean 'importance'.

It is difficult to estimate the validity of non-quantitative information. Its accuracy and reliability can be estimated, but only crudely, by reference to the intellectual competence and veracity of the reporter or by reference to his documents and other material. The problem of estimating the validity of narrative accounts of criminal activity is like the problem of estimating the validity of any historical narrative. The reliability of descriptions and characterizations of criminals or their environments or treatment is similarly difficult to estimate, particularly if different reports disagree about matters with which they *purport* to be commonly concerned. The difficulty is increased in those cases in which the characterization of an individual is based upon some scheme of diagnosis, particularly if there is obvious disagreement among diagnosticians in the same field.

The validity of quantitatively expressed information is more easily tested. Ideally it should be possible to repeat the observations or the measurements and in this way to check the reliability of any numerical statement. When for one reason or another this kind of check is not possible, it is at least possible critically to examine the method of the research and its statistical technique, and in this way to estimate the validity of the findings, although less precisely.

We shall in subsequent chapters undertake a critical examination of criminological researches with a view to estimating their validity. Suffice it to say here, first, that the validity of non-quantitative information is so indefinite as to render it untrustworthy for either scientific or practical purposes, and, second, that the validity of quantitative information varies from an extreme of clear invalidity to an extreme of valid knowledge, sufficiently accurate and reliable for either scientific or practical use.*

The significance of a body of knowledge varies independently of its validity. We can therefore assume that the knowledge we

*The degree of reliability and accuracy required is not absolute. It is always relative to the nature of the particular investigation, its problems and methods. There are ways of determining the coefficient of irreducible error and the standards of precision and uniformity by which to judge the validity of the data in a given piece of research. We must not be understood as saying that untrustworthy information is useless for practical purposes. It may be used but the user takes the risk.

are considering is valid, and ask what is its significance. The significance of a body of knowledge can be most clearly seen in terms of the questions which it can be used to answer, and the significance of those questions in terms of other theoretical or practical problems to which they are related.

The information which criminological research has given us can, of course, be considered as having been obtained for its own sake. Thus considered, its significance is revealed by the following questions :

1. What are the various ways in which individuals perpetrate crimes?
2. What are the characteristics of the criminals who have been observed?
3. From what kinds of environments do these criminals come?
4. What are the various ways in which society, officially and unofficially, treats individuals suspected or convicted of crime?

Whatever its validity, the significance of the knowledge resulting from criminological research is, at least, its capacity to answer these four questions. One can then ask what is the significance of these questions? The answer must be given in terms either of further questions to be answered or of practical problems to be solved.

The further questions in which the criminologist is admittedly interested, and for the sake of which much of this information has been gathered, are questions about the causes of criminal behavior. Questions of this sort constitute a problem of etiology. The further significance of the knowledge gained by criminological research can therefore be determined by examining this knowledge for its ability to solve the etiological problem. The solution is necessarily prerequisite to any attempt to prevent or control the phenomena of crime.⁵ It is important to see that one cannot pass

⁵By attempts to prevent and control crime we mean undertakings comparable to engineering. Technology in the field of social phenomena depends upon etiology just as in fields of physical and biological phenomena. It is of course understood that attempts to prevent and control crime *can be made* in the absence of an etiology, but they can be no more than trial and error gropings.

directly from knowledge which merely answers the first four questions, but fails to solve the etiological problem, to a solution of the basic practical problem of crime. The practical significance of criminological research therefore turns upon its significance in relation to the etiological problem. We must therefore formulate this problem.

We have distinguished in an earlier chapter between potential and actual criminals. All the members of a given society are at any time either potential or actual criminals. In terms of this distinction we can ask: (1) Why do some potential criminals become actual criminals? (2) Why do not all potential criminals become actual criminals? These two phrasings of the same question call attention to factors which operate either positively or negatively with respect to the occurrence of criminal behavior. Stated more generally, the etiological question is what are the factors relevant to the occurrence of criminal behavior.

But this formulation is not sufficiently analytical to indicate the precise nature of the problem of causation or to indicate the kind of knowledge which is required in order to solve this problem. The word 'cause' has had many meanings in the long history of its usage by philosophers and scientists.⁴ It has become a word of common speech and its common usage is a confused and debased vulgarization of its philosophical connotations.

It is important here to determine the precise meaning of the word 'cause' as used by empirical scientists. We are not asking what the word 'cause' *really* means. We are simply concerned to know what an empirical scientist means when he formulates a causal problem. The way in which he formulates a causal problem gives us his meaning. When he is seeking causes, the empirical scientist is seeking to find the precise nature of the relation of dependence which obtains between a given item on the one hand

⁴In his analysis of causation Aristotle considers 'cause' as one of the fundamental metaphysical concepts, but the meaning there developed must be distinguished from the one attached to 'cause' in the empirical sciences. Thus, the sense in which the criminal law is said to be the *formal cause* of a crime is distinguished from the sense in which Aristotle distinguishes the efficient. John Stuart Mill is distinguished by 'efficient cause' with the empirical science.

and one or more items on the other hand. Interdependent items vary with one another, and are called variables. Strictly speaking, they are co-variables; and the inquiry is always one into the precise nature of their co-variation. The distinction between cause and effect is made in terms of independent and dependent variables.⁵ Every independent variable may, of course, be in turn a dependent variable, and what is a dependent variable in one connection may be an independent variable in another. A proposition which formulates some type of co-variation among variables is a general proposition, and may be either a correlation or a function.⁶

We can formulate etiological questions clearly and explicitly only when we can propose definite correlations or functions as problems to be investigated. When our analysis or our knowledge of a given field is such that we possess neither a definite set of variables nor any tentative formulations of co-variation, the only questions which we can frame are those which indicate that we have an interest in etiology. That is the situation in the field of criminology. The quantitative and non-quantitative descriptions which constitute the information resulting from criminological research suggest a large field of factors which may or may not be relevant variables in the etiology of crime. But the lack of an analysis of this group of factors and the character of the information we have about them, make it impossible to formulate specific etiological questions. We can do no more than state the following problems:

1. What is criminality a function of? Criminality is here viewed as a dependent variable, and this question may take the form: Is criminality a function of x ? Is criminality

⁵In common usage, a 'cause' is always temporally prior to its 'effect'; but 'causes' and 'effects' as co-variables are not related as temporally prior and posterior. In medicine the term 'cause' is often used in its common sense connotation as a temporal antecedent, but this loose usage can always be refined by the formulation of the dependence of variables.

⁶By a correlation we do not mean a statistical coefficient of correlation, which is a measure of correlation. By a function we do not mean an equation, which is merely a special case of a function.

a function of some relation of x and y ? Is criminality a function of some relation of x , y and z ?⁷

2. What is any type of criminality a function of?
3. What is non-criminality a function of?
4. What is any type of non-criminality a function of?

Each of these last three questions can be analyzed in the same way as the first one. They differ from the first only with respect to what is chosen as the dependent variable. As in the case of the first question, we cannot at present attempt a more precise formulation of these etiological problems.

The major practical problems of crime are concerned with the deterrence of potential criminals and the reformation of actual criminals. These problems are special cases of the problem of controlling criminal behavior. Deterrence can be conceived in terms of the influence of the official treatment of actual criminals upon potential criminals; prevention can be conceived in terms of all of the various non-official influences and official influences, other than the treatment of actual offenders, which can be brought to bear on potential criminals to deter them from becoming actual criminals. The practical problems of deterrence, reformation and prevention require for their solution knowledge which answers etiological questions of the types indicated above. The question of the reformative effects of different methods of treatment is an etiological question in which one or another method of treatment is an independent variable, and recidivism is the dependent variable. The question of the deterrent effects of one or another method of treatment is an etiological question in which the dependent variable is criminality or some type of criminality, and a method of treatment is one of the independent variables.

It should be clearly seen as the result of the foregoing analysis of the manner in which empirical scientists formulate questions

⁷We can propose as many questions of this sort as we can think of specific variables to substitute for x , for y and for z . To answer any of these questions we are required to state the kind of functional dependence which obtains between crime and the independent variables and what kinds of relation obtain among the independent variables themselves.

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of etiology that we are not concerned here with the 'real causes' of crime, whatever the phrase may mean. Empirical science is not fitted to undertake inquiry with respect to ultimates. The analysis which is employed in empirical science never goes beyond the construction of a set of variables. Empirical knowledge of causation is nothing more than knowledge of the relations which obtain in a given set of variables.

We are now prepared to evaluate the usefulness of existing knowledge in criminology in solving causal problems. It should be remembered that we are, for the time being, assuming that it is valid knowledge. If it is not valid it must not be used, even though it is usable, in attempts to solve causal problems.

In the first place, it is clear that the non-quantitative knowledge, the descriptions, narratives and characterizations which criminologists have recorded, has no etiological significance. It does not provide evidence relevant to formulae of co-variation. Etiological propositions need not be quantitative; the interdependence of the co-variables may not be a matter of degree, but rather an all-or-none type of relation. But whether or not etiological propositions express continuous or discrete functions, whether or not dependence is partial or complete, descriptive knowledge must consist of observations of instances of precisely defined variables in order to possess etiological significance. The only value of the non-quantitative information which has been collected is its possible suggestiveness, by which we mean its power to reveal factors which may or may not, upon examination, be capable of sufficiently precise definition to be employed as variables.

In the second place, the quantitative knowledge lacks etiological significance because, as subsequent discussion will reveal, the researches yielding this knowledge have not been directed by problems formulated in terms of the co-variation of variables. The quantitative findings at best measure the correlation of one or more factors with criminality, or recidivism, or some type of criminality. But these indices of correlation, often expressed by

the comparison of averages or percentages,⁸ neither solve the problem of the relation of the various factors *inter se* nor define the functional dependence of criminality upon a set of related factors. There is a further reason for the insignificance of the statistical products derived from these quantitative data. Almost all of the statistical findings, whether averages, percentages or coefficients of correlation, are *merely* statistical descriptions.

By a statistical description we mean a number which is achieved as a result of the application of statistical processes to quantitative data, but which is significant only with respect to the data in question. A statistical description is always a description of some sampling of a universe, and never goes beyond that sampling. A statistical conclusion or inference, in contrast, is always a statement about the universe from which the sampling has been taken. Any contribution to the solution of the problem of the causes of crime would have to be at least a statistical inference, but in almost no case have the original data permitted, or the statistical processes yielded, inferential products. The quantitative knowledge, therefore, is almost entirely descriptive.

There is still another way of saying that none of the statistical findings derived from the quantitative data yields answers to etiological questions. The findings themselves show that every factor which can be seen to be in some way associated with criminality is also associated with non-criminality, and also that criminality is found in the absence of every factor with which it is also seen to be associated. In other words, what has been found is merely additional evidence of what we either knew or could have suspected, namely, that there is a plurality of related factors in this field, and that the solution of etiological questions depends upon our ability to isolate and control a plurality of variables. At any rate, these statistical findings themselves clearly reveal their own

⁸Thus, criminologists have used their quantitative findings to state that such and such a percentage of a group of criminals possess a certain trait, or certain degrees of a trait, etc. For the most part, only crude averages or percentages are used to measure correlation; in less than a dozen studies coefficients of association or contingency or tetrachoric *r*'s have been employed. In the three subsequent chapters in which we report and examine most of the quantitative research which criminologists have done, we shall undertake explicitly to criticize the statistical operations which investigators have performed.

inadequacy to answer the etiological question. Their inconclusiveness, and hence their insignificance as anything except descriptive knowledge, is plain.

We can conclude this section by a brief summary of the main points in our evaluation of the results of criminological research:

1. The significance of knowledge in this field is purely informational. It cannot answer etiological questions.
2. Most of the work has not been directed toward answering such questions. It has resulted either in non-quantitative descriptions and narrations which are useful only in a vague, suggestive way, or in statistical descriptions.
3. Not only has this body of information no etiological significance, but it is useless from the point of view of the major practical problems of crime, since the control of crime depends upon knowledge of its causes.⁹

If we use 'scientific knowledge' arbitrarily to refer to knowledge which goes beyond mere description, we can conclude our analysis thus far with the statement that the work of criminologists has not resulted in scientific knowledge of the phenomena of crime. We shall therefore attempt to discover why criminological research has failed to accomplish that which is of primary practical importance. It cannot be because criminologists are not interested in the causes of crime, but rather because they have been frustrated for one reason or another in their attempts to answer etiological questions. In the two following sections of this chapter we shall analyze what we think to be the two basic reasons for the failure of criminology to become a science. The first is the inadequate conception or the misconception of the nature of science and scientific method which has prevailed among investigators in this field. The second is the dependence of scientific

⁹We have already pointed out that in the absence of an etiology, trial and error attempts to control crime can be made. But unless such efforts are directed as experiments whereby to gain knowledge as well as to control crime, our successes and failures must remain unintelligible to us, and our future practice will be unintelligent. Diseases may be prevented and cured without knowledge of their causes, but unless we know the etiology of the therapeutic process itself, 'empirical medicine' is blind and precarious.

work in criminology upon the development of psychology and the social sciences as empirical sciences. In the course of the discussion of these two points, aspects of the foregoing analysis which have been touched only lightly will be treated in greater detail, particularly the nature of science and scientific method.

Section 2. The Requirements of Scientific Work in Criminology.

The failure of researches in criminology to achieve knowledge which affords significant answers to questions of etiology can be considered as a failure only if the aim of criminological research has been to achieve knowledge of the causes of crime. There can be no question that this aim has dominated almost all criminological investigation, although much of the work, which is merely exploratory and is content with recording more or less valid observations, pays no more than lip service to this avowed aim. Even the best work is inadequately conceived and executed from the point of view of etiology. In order to solve the problem of causes, criminologists should have undertaken to construct a science of the phenomena of crime.

To understand this criticism of criminological research it is necessary to state briefly the essential distinction between scientific knowledge and other kinds of knowledge. We are here concerned, of course, exclusively with the type of knowledge which can be obtained by the methods of empirical science. By scientific knowledge we therefore mean empirical scientific knowledge. We shall first consider the nature of an item of scientific knowledge and then proceed to the characteristics of a science, as that which is composed in a certain way of items of knowledge of this sort.¹⁰

¹⁰The following brief exposition of the nature of empirical science and scientific method can do no more than to select a few traits of scientific knowledge. These traits constitute the minimum essentials which suffice to distinguish scientific from other kinds of knowledge, and determine the requirements which criminological research must satisfy in order to be scientific. For a fuller discussion of the nature of empirical science and its methodology the reader is referred to E. Cassirer, *Substance and Function*, H. Poincaré, *The Foundations of Science*, C. I. Lewis, *Mind and the World-Order*, M. R. Cohen, *Reason and Nature*, C. D. Broad, *Scientific Thought*, A. D. Ritchie, *Scientific Method*, N. R. Campbell, *Measurement and Calculation*, H. Jeffreys, *Scientific Inference*, J. Rueff, *From the Physical to the Social Sciences*; V. F. Lenzen, *Physical Theory*; J. M. Keynes, *A Treatise on*

What we have called information or descriptive knowledge, whether non-quantitative or quantitative, whether it consists of narratives or characterizations, always has a limited reference to particular things or events or to definite aggregates of particular things or events. It is the kind of knowledge out of which histories and biographies are constructed. *It is also indispensable in the development of a science, but by itself it is not sufficient.* A proposition of scientific knowledge, in contrast to propositions of descriptive knowledge, never has a restricted reference to particular things or definite aggregates of particular things. A scientific proposition is always a general proposition. It always states more than can ever be observed; it is a generalization which goes beyond the evidence which has been or can be gathered. While it goes beyond the evidence, it must always rest upon definite evidence in a definite way. Both of these traits are essential to the nature of a scientific proposition: first, that it have generality in the sense of going beyond the evidence, and second, that it have a determinate validity¹¹ in the sense that it rests in a definite way upon the evidence.

It can now be seen that a proposition expressing a statistical inference has some of the traits of a scientific proposition, whereas a proposition expressing a statistical description has not. This can be illustrated simply as follows: Suppose one were to take a sampling of the criminal population and measure the intelligence

Probability, Aristotle, *The Organon* Different points in our brief exposition are adequately discussed in one or another of the foregoing treatises. While these works differ on many details *inter se*, they represent a common analysis in the main; the essential traits of scientific knowledge and scientific method are not matters of dispute or opinion. It is important to recognize this. We are not offering here our 'opinion' about the nature of science; the nature of science is not a subject about which there are 'opinions'. The reader who would disagree with any thesis advanced in the subsequent analysis must demonstrate its error, he cannot dismiss it in favor of some other 'opinion' which he prefers to hold. It will be noted that we have omitted reference to J. S. Mill's discussion of scientific method in his *System of Logic*. He is the source of the confusions which, as we shall later point out, have become current in the social sciences. For criticisms of Mill see W. Whewell, *The Philosophy of the Inductive Sciences* and W. S. Jevons, *The Principles of Science*.

¹¹By the validity of a proposition is meant its modality or truth-value, truth, falsehood or some degree of probability. This use of 'validity' must be distinguished from our previous use of the word to designate the value of observations, their reliability and accuracy. It should be noted that in so far as a general proposition rests upon evidence, its validity, in the sense of its modality, is determined by the validity of the evidence, in the sense of its accuracy and reliability.

of the individuals in that sampling. The proposition which states the quantity of intelligence possessed by each individual in that sampling is, of course, a descriptive proposition. But in the same way the proposition which states the average intelligence of the group is a descriptive proposition of the kind which we have already called a statistical description. The sampling which we have chosen is some definite group of particular individuals. The number which states the average intelligence of that group is obtained by the simplest of statistical processes and differs from the numbers which express the measure of intelligence of each individual in the group by reason of the fact that it is obtained by a process of calculation from numbers which have been obtained by a process of observation and measurement. The average, taken without further qualifications, must be restricted in its reference to the group which has been measured.

Now suppose that the sampling of the criminal population which we have chosen satisfies the logical requirements of fairness, homogeneity and size; let us further suppose that the individual measures of intelligence are reliable and accurate as measurements, and that intelligence appears to have a normal distribution. Further statistical techniques can now be used to make the generalization which is called a statistical inference. This generalization will state, not what the average intelligence of a particular aggregate of criminals is, but an approximation of the true average of intelligence of the criminal population from which they come. This generalization exhibits two traits possessed by any scientific proposition. It goes beyond empirical evidence obtained by observation and measurement; its validity can be determined by reference to that evidence. But the proposition expressing a statistical inference is not a scientific proposition. It lacks one other trait, namely, it does not express a relation of variables.

A variable is any term which does not refer to particular things, that is, individuals or definite aggregates of individuals. Words which refer to classes, or which are names for universal characteristics whether they be viewed as qualities or quantities,

are variable symbols. In this sense a definition is a scientific proposition since none of the terms in a definition refer to individual things; they are all variables, and the definition formulates the relation which obtains among them. Similarly algebraic equations and functions¹² are scientific propositions when meanings are assigned their constituent symbols by reference to the defined terms of a science. There are many different types of scientific propositions but they all possess, as essential to their nature, the three traits which have thus far been pointed out, namely, (1) generality in the sense of going beyond the evidence, (2) determinate validity in the sense of resting upon definite evidence, and (3) the formal character of the general proposition as a relation of variables. Scientific propositions differ in type according to the type of 'correlator' employed.¹³ These traits are so clear and unambiguous that it is impossible to confuse a scientific proposition with one which reports information or descriptive knowledge. Our subsequent survey of criminological researches will substantiate the statement that the body of knowledge called criminology does not contain a single scientific proposition; at its best it has achieved indices of correlation which are statistical descriptions of doubtful validity.

It is important for our purposes to distinguish scientific knowledge, not only from descriptive knowledge, but from two other kinds of knowledge as well. The literature of criminology does contain general propositions, in addition to descriptions. These general propositions, however, are not scientific propositions for

¹²A function can be defined as follows: 'If two or more variables are so related that to any given set of values, comprising one and but one value for each of the variables except one of them, there corresponds at least one value of the latter variable, each of the variables is said to be a function of the other.' Keyser, *The nature of the doctrinal function and its r* 41 *Yale Law Journal*, 716)

¹³Examples of different kinds of scientific proposition: *Physics*, Galileo's *Two New Sciences*, Newton's *Principia mathematica* and *Optics*, Morgan's *Theory of the Gene*, Lenz's *Physical Theory*, and any college text-book of physics, chemistry, botany, physiology, etc. Scientific propositions can always be distinguished from knowledge which is called 'scientific', but which is merely descriptive and which differs from common sense description only by virtue of greater accuracy and reliability. The literature of the 'biological sciences' will be found to contain few scientific propositions in contrast to the great bulk of descriptive knowledge which it contains.

two reasons. In the first place, they do not rest upon definite evidence by reference to which their validity can be determined. In the second place, they are isolated generalizations, whereas we shall see that a fourth characteristic of a scientific proposition is that it is a member of a set of propositions. We shall return to this fourth trait later.

The non-scientific generalizations to be found in the literature of criminology are of two sorts. They are either generalizations based upon common experience or generalizations based upon individual experience. For purposes of discussion we shall call the former 'common sense generalizations', and the latter 'opinions', realizing that we are using these words somewhat arbitrarily. The difference between common sense generalizations and opinions is that the former are generally recognized as having a high probability because of the common experience upon which they are based, whereas the latter are not so recognized. The line dividing opinions from common sense generalizations is a vague one. It might be difficult to classify some of the general propositions to be found in the literature of criminology under one or the other head, but the line between common sense generalizations and opinions, on the one hand, and scientific propositions, on the other, is a precise and sharp one. There is no difficulty at all in seeing that the general propositions to be found in the literature of criminology are either opinions or common sense generalizations, but not scientific propositions.

Let us now turn to the fourth trait of scientific propositions, a trait possessed by them but not by opinions and common sense generalizations. A scientific proposition is always a proposition in a science and a science never consists of a single proposition; a scientific proposition is one of a set of propositions. It stands in certain definite relations to other members of this set. The terms of scientific propositions are variables. A set of scientific propositions, to be a set, must consist of propositions which have common variables; that is, each proposition in the set must contain at least one variable which is to be found in some other proposition in the set. This trait of a scientific proposition, that

it belongs to a set of propositions, is called its compendency. More properly speaking, it is the set of propositions which is compendent, but any proposition in the set may be said to be compendent with the others. Opinions and common sense generalizations are never found organized in compendent sets of propositions. They are always either isolated generalizations or members of indefinite aggregates of generalizations.

The foregoing discussion of the traits of a scientific proposition enables us now to state very simply the characteristics of a science and to distinguish an empirical science from a rational science. This distinction is important because (1) it helps to make plain the nature of empirical science, and (2) it is necessary to distinguish criminology from the study of criminal law which, as a science, would be a rational rather than an empirical science.

A science must always have a subject matter and this subject matter must always be capable of differentiation from the subject matters of other sciences. The unity of the subject matter of a science is expressed by the compendency of its terms or variables. The differentiation of one science from another is accomplished by our ability to distinguish clearly between sets of compendent terms or variables. A science will be dependent upon or independent of other sciences, according as they have or do not have common terms. In the following section of this chapter we shall consider whether criminology would as a science be a dependent or an independent science.

A science can be viewed either with respect to the relation of its terms or the relation of its constituent propositions. What we are here calling the terms or variables to be found in the propositions of a science are often called the concepts of that science. A concept is nothing more than a variable. The relation of the concepts of a science is a structure which is exhibited in the propositions of that science. When the propositions of a science are considered solely with reference to the conceptual structure which they exhibit, they can be said to constitute a theory or an analysis. These two words can be used interchange-

ably. A theory is a set of compendent propositions which, by exhibiting the conceptual structure of a science, presents an analysis of the subject matter of that science. In any field of investigation the absence of a set of compendent general propositions must, therefore, mean the absence, not only of a science, but of a theory or an analysis of that subject matter. There is no theory or analysis to be found in the literature of criminology.

A set of general propositions may be not only compendent but systematic. A set of propositions forms a system when they are ordered in a certain way with respect to one another. If the validity of some of the propositions in the set can be seen to rest upon the validity of others, and if the validity of all the propositions in the set can be seen to rest upon the validity of a small number of propositions outside of the set, the propositions are systematically ordered. When they are thus ordered they are said to constitute a rational science. The propositions which lie outside the given set, and upon which the validity of the propositions in the set can be seen to depend, can be called the rational base of the set of propositions. This rational base is itself a set of general propositions consisting of what are commonly called definitions, axioms and postulates. A rational science is therefore one in which the propositions of the base can be used to demonstrate the propositions of the dependent set which are called theorems. The various geometries, theology, and what is called rational mechanics, are examples of rational sciences of independent subject matters.

An empirical science of any subject matter can be distinguished from a rational science by the fact that the validity of its constituent propositions rests upon an empirical, as opposed to a rational, base. It is as the result of this fact that the propositions of empirical science are merely compendent; they are not systematic. Each of the theorems of an empirical science has a validity which is determined by reference to empirical evidence resulting from observation and measurement. It ceases to be a theorem of empirical science when its validity can be determined by reference to other general propositions in that science and

without regard to empirical evidence. It should be noted that we have called the propositions of an empirical science theorems just as we called the demonstrated propositions of a rational science, theorems; they are theorems in the sense, first, that they are propositions in a theory by virtue of their trait of compendency; and, second, that they are propositions whose validity is determined by a process of proof.

The difference between the theorems of an empirical science and those of a rational science can be stated in terms of the distinction between induction and deduction. A general proposition is said to be deductively proved when its validity is established in terms of other general propositions and *only* in terms of other general propositions. A general proposition is said to be inductively proved when its validity is established in terms of descriptive propositions *as well as* of general propositions. Inductive proof always involves some general propositions but *never only* general propositions. Descriptive propositions which are employed in inductive proof report our knowledge of the empirical evidence relevant to the general proposition which is the theorem.

There is one further distinction to be made between the propositions of an empirical and those of a rational science. We have said that empirical scientific propositions always go beyond the evidence. This trait expresses itself in the fact that inductive proof of an empirical scientific proposition never results in the establishment of the general proposition as more than probable. The validity of an empirical scientific proposition is therefore always some degree of probability. By deductive proof, on the other hand, the propositions of a rational science are established as true, and never as probable. Whenever a general proposition can be established as true it ceases to be a proposition of empirical science.

Whereas the difference between the nature of an empirical science and the nature of a rational science is perfectly clear, a given science may exhibit some of the traits of empirical science and some of the traits of rational science. At some stage in its development, definitions and postulates may be made and some

of its theorems may be deductively established therefrom, whereas other theorems may still rest upon an empirical base. In other words, sciences can be found in all degrees of organization, ranging from the purely empirical science to the purely rational science.¹⁴ Furthermore, it is possible to have both an empirical and a rational science of the same subject matter. In some cases, the same propositions may occur as theorems in both an empirical and a rational science. The best examples of this are the propositions of geometry which in one connection are the deductively established theorems of a rational science, and in another connection are viewed as propositions in physical geometry, and, hence, as capable of being verified in terms of observations and measurements. As propositions of empirical science, resting upon an empirical base, they are established as probable propositions.

Having considered the nature of empirical science, we now turn to a consideration of scientific method. Empirical scientific method is both too complex and too various in its manifestations to be adequately described in this book, but it is possible to state the minimum requirements which must be satisfied by investigations which seek scientific knowledge. The failure of criminological researches in this respect will be seen in part to depend upon the failure of the investigations in this field to satisfy these minimum requirements. It will be apparent that the minimum requirements we are about to state follow directly from the traits of an empirical science and of its constituent propositions.

The distinguishing feature of an empirical science is, as we have seen, the empirical base upon which it rests. This empirical base consists of descriptive propositions of one type or another which record the evidence obtained by observation and measurement. The first requirement to be satisfied by research which seeks scientific knowledge is, therefore, that it shall employ techniques of observation and measurement designed to obtain data in terms of which a general proposition can be inductively established as possessing a definite degree of probability. This require-

¹⁴For a fuller discussion of these gradations, see C. J. Keyser, *Thinking About Thinking* and R. D. Carmichael, *The Logic of Discovery*.

ment is a complicated one; it involves criteria of relevancy; it involves the intricacies of inductive proof and the subtleties of a calculus of probabilities. These matters cannot be gone into here. It must suffice for our present purpose to emphasize one aspect of this first requirement, namely, that what is properly scientific research cannot be executed in the absence of a general proposition to be proved inductively. It is to be noted that we are not using 'induction' here as the name for a process of discovery, but rather as the name for a process of proof.

This first requirement can be summarized very simply. Scientific research must be directed by a problem; a problem is always formulated in terms of a proposition in question and this proposition is appropriately called a problematic proposition. All the theorems of an empirical science are problematic propositions in the sense that they have been or are to be submitted to the test of empirical evidence. Since scientific research cannot be accomplished in the absence of a problem, and a problem cannot be formulated except in terms of problematic propositions, and since a problematic proposition is always a theorem and, as such, a constituent proposition in a theory or analysis, it follows that scientific research in any field cannot be accomplished in the absence of a theory or analysis of the subject matter of that field.

It is necessary to distinguish between exploratory and directed research. What we have called scientific research is always directed. Exploratory research may be a necessary preliminary to scientific research. Exploratory investigations can, of course, result only in descriptive knowledge, either quantitative or non-quantitative. The usefulness of exploratory work as a preliminary to scientific work depends, of course, upon the suggestiveness of the descriptive knowledge which it achieves. The word 'induction' is often used to mean the psychological act by which we generalize from experience. What we have here called the suggestiveness of descriptive knowledge is its power to produce inductions in this sense.¹⁸ It must be obvious that a theory can-

¹⁸Inductions, in this sense, must be distinguished from inductive proof and from intuitive inductions as defined by Aristotle. Inductions in this sense are guesses or hunches.

not result solely from inductions suggested by descriptive knowledge. These inductive generalizations may provide some of the materials out of which a theory is constructed, but the construction of a theory is a rational process which transforms the materials it uses.

A science cannot come into existence in a given field until a theory or an analysis has been constructed. Prior to the existence of a theory it is impossible for scientific research to be done. This does not mean that exploratory researches prior to the existence of a theory are not useful, but merely that they are essentially different from scientific researches which occur after a theory exists. It also means that exploratory research cannot by itself create a science; at the most the descriptive knowledge and the isolated generalizations which exploratory research produces provide the raw materials which may be more or less useful in the making of an analysis and in the development of a compendent set of general propositions to be tested by scientific research. A science grows both by the development of its theory and by improvements in its techniques for gaining evidence, *but a science must first exist before it can grow.*

This first requirement of scientific method explains the insignificance of the descriptive knowledge which has resulted from criminological investigations. In the absence of a theory or an analysis it could not be otherwise. The etiological problems which we formulated in the preceding section are too loosely stated to be capable of directing scientific research. Our inability to formulate problematic propositions with respect to the etiology of crime is the inevitable consequence of the non-existence of a theory or an analysis. The literature of criminology clearly illustrates the impossibility of scientific research in the absence of a theory. That the body of knowledge which has so far been collected consists of nothing more than descriptions of one sort or another, descriptions which cannot be significantly employed to answer even the loosest etiological questions, is a state of affairs which could have been predicted from an examination of the methods of research.

The first characteristic of empirical scientific method is, then, that the data it obtains are significant with respect to a scientific proposition. By significance we mean relevancy to the general proposition and ability to aid in the determination of its probability. A second requirement is closely related to the first one. The data of research must not only be significant but reliable and accurate. By reliability we mean what is sometimes called objectivity, namely, that the same data can be obtained by other investigators at other times and places if certain conditions are capable of being reproduced. By accuracy we mean a degree of precision relative to the needs of the given problem. There is no absolute standard of accuracy of data.¹⁶

What is to be observed or measured must be clearly defined before observation or measurement can be undertaken, if one desires to obtain reliable and accurate data. If the data are gained by means of measuring instruments, the definition is made in terms of an analysis of the measuring instrument. If the data are obtained by what can be called direct observation (observation unaided by instruments), the definition required is the definition of a concept.

This second requirement makes clear that scientific observation is different from the ordinary observations of men in the course of their daily lives. The latter are observations made in terms of the concepts to be found in our common sense knowledge of the world about us. It is in terms of these concepts that we perceive chairs, houses, trees and oceans. Scientific observation is observation made in terms of the concepts of science; it must not be made in terms of the concepts of common sense knowledge. In short, the existence of a theory or conceptual analysis is the prerequisite to the necessary trait of reliability and accuracy of scientific observation, just as the existence of a theory, the existence of problematic propositions to be proved, is a necessary prerequisite to the significance of the data obtained by observation.

¹⁶Thus, in one case it may be necessary to carry measurements and calculations out to three or four decimal places, while in another case rougher approximations will suffice.

A third trait of scientific method is the development of the data of observation by processes of inference. These processes are interpretations of the data in terms of theoretical formulae. Not all the evidence which is needed in order to determine the probability of problematic propositions can be achieved by observation; much of it must be gotten by inference, inference which develops the implications of the data of observation. If the observational data are quantitative, the processes of inference are always calculations which are either statistical, in the strict sense, or mathematical. But these calculations are never purely statistical or mathematical, for they must be guided by the meanings of the terms, the meanings assigned to the variables being employed. In other words, the inferential processes involved in scientific method are also dependent upon some theory or analysis.

We can now summarize the foregoing discussion of scientific method. The evidence upon which the probabilities of the theorems of empirical science rest, consists of data of observation and products of inference from these data. The data of observation must be reliable, accurate and significant in order to justify and permit inferential development. The products of inference must be not only the valid results of calculation, but significant as well. We have seen that the validity and the significance of the data of observation and the products of inference depend upon the body of concepts which, as related to one another, constitute a theory or an analysis of the field of phenomena under investigation. The proper cooperation of theoretical analysis, observation and inference is the essential trait of empirical scientific method. To restrict the use of the term scientific to such research as manifests the cooperation of these three processes is merely to hold that no research is properly called scientific unless it succeed in determining the probability of a scientific proposition. This use of the term scientific does not deny or ignore the usefulness of exploratory investigations; it merely indicates the limits of that usefulness. We have already seen what that limit is in the case of criminology.

The foregoing discussion also makes clear the distinction between what can be called the findings of research and its conclusions. The findings of an investigation are the report either in detail or in summary of the results of processes of observation and measurement. If the data are quantitative, the findings are usually reported in the form of statistical descriptions. The findings always consist in descriptive knowledge. The conclusions of scientific research are general propositions established to a certain degree of probability. The conclusions of scientific research never consist in descriptive knowledge. Processes of inference and calculation must intervene between the findings and the determination of the probability of the generalizations which are the conclusions therefrom. In order for the findings to be employed in this way, to be capable of inferential development and, along with the products of inference, to be capable of providing an evidential basis for the determination of the probability of a generalization, it is necessary that the findings be the result of observational processes which have been directed by the problematic propositions with respect to which they are to be relevant. If, as in the case of criminological research, the observational processes have not been so directed, the findings constitute a body of descriptive knowledge with extremely limited significance and completely incapable of yielding scientific conclusions.

A possible misunderstanding of this analysis of scientific method can be pointed out in order that it be avoided. We have not attempted to offer a description of scientific method, or an account of the way in which scientists actually work and think, or a history of the development of the empirical sciences. We have not stated, for instance, that a *completely developed* theory must be temporally prior to the execution of scientific investigations; nor have we attempted to take account of the factors of imagination and ingenuity which are necessary in the contrivance of general propositions or in the making of an analysis.

To understand the foregoing discussion of scientific method as a descriptive report of the way scientists work or think would be to mistake it entirely. It must be understood for what it is,

namely, an all too brief statement of the minimum logical requirements of scientific method in the light of the essential traits of empirical science. The analysis is too brief to provide instruction in the art of scientific work; it does not prescribe a specific course of action to be followed by investigators in the field of criminology. Its chief purpose has been to make clear the basis of our evaluation of the knowledge that is found in the field of criminology today, and to explain what is meant by the statements (1) that no science of criminology now exists, and (2) that this is in part due to misconceptions or inadequate conceptions of scientific method by criminologists.

A full substantiation of this last point can be achieved only by a detailed examination of criminological research. This will be done in subsequent chapters. We need only say here in advance that it will be found (1) that the data yielded by observation or measurement are both invalid and insignificant because the concepts prerequisite to observation were not clearly defined or, what is worse, were the concepts of common sense knowledge; (2) that most of the data resulting from observation and measurement are incapable of having their significance developed by processes of inference or calculation; (3) that even the best researches have succeeded in yielding no more than statistical descriptions because of the utter lack of direction by theoretical analysis; (4) that even on the level of descriptive knowledge, the findings are largely unreliable because of inadequacies in the observational processes and in the application of statistical techniques. These criticisms, of course, apply primarily to the quantitative work which criminologists have done. The non-quantitative researches, of which there are a vast number, differ from common sense observation only with respect to the slightly greater detail of the report and the greater accuracy of some of the narratives which have thus been produced. Criminological research thus exhibits all of the defects of raw empiricism.

By raw empiricism we mean an exclusive emphasis upon observation to the total neglect of the abstractions of analysis. Raw empiricism is the most prevalent misunderstanding of the

nature of empirical scientific method. It is responsible for the failure of investigations in the field of psychology and the so-called social sciences to eventuate in scientific conclusions or in the construction of sciences appropriate to those fields.¹⁷ Criminological investigators, who have for the most part been recruited from the fields of psychology and sociology, exhibit the lack of understanding of scientific method which characterizes most of the research in these fields. Raw empiricism is an extreme reaction against the methods of rational science which at other times have dominated the fields of psychology and the social sciences. But like other extreme reactions it has gone too far. In its insistence upon the evidential or observational element in empirical science it has ignored that other indispensable component, theory or analysis.

We have shown that the rôle of theory in empirical science is clearly different from what it is in the development of rational

¹⁷In an article entitled *Pragmatism and current thought* (*J of Phil*, 1930, 27, 238-246) Professor C I Lewis criticized Professor Dewey's support of raw empiricism in science. He said in part "Goodness in a concept is not the degree of its verisimilitude to the given, but the degree of its effectiveness as an instrument of control. Perhaps Professor Dewey might even, with entire consistency, find less occasion to regret that the relatively undeveloped sciences of human affairs show a tendency to imitate this abstractness. When the social sciences attain that degree of abstractness, and consequent precision, which already characterizes physics and mathematics, perhaps they will have less trouble getting their social elephants into their social box cars. Economics is the best developed of the social sciences, and a fair illustration."

Professor Dewey's answer to this criticism (*J of Phil*, 1930, 27, 271-277) is extremely important in that it reveals the chief exponent of current pragmatism as repudiating the position which, as readily and excessively espoused by his followers, is so largely responsible for the raw empiricism of social science research. He said: "I find myself in such sympathy with the article of Mr. Lewis that I shall confine my comment upon it to one minor point. He says, 'Professor Dewey seems to view such abstractionism in science as a sort of defect—something unnecessary, but always regrettable; an inadequacy of it to the fullness of experience.' I fear that on occasion I may so have written as to give this impression. I am glad therefore to have the opportunity of saying that this is not my actual position. Abstraction is the heart of thought, there is no other way—other than accident—to control and enrich concrete experience except through an intermediate flight of thought with conceptions, relata, abstractions. What I regret is the tendency to erect the abstractions into complete and self-subsistent things, or into a kind of superior Being. I wish to agree also with Mr. Lewis that the need of the social sciences at present is precisely such abstractions as will get their unwieldy elephants into box-cars that will move on rails arrived at by other abstractions. What is to be regretted is, to my mind, the tendency of many inquirers in the field of human affairs to be over-awed by the abstractions of the physical sciences and hence to fail to develop the conceptions or abstractions appropriate to their own subject-matter."

science. In the latter, theory is the deductive development and systemization of propositions in terms of a rational base. In the former, it consists merely in an analysis which indicates the interrelation of the concepts of the science and which is expressed in the compendancy of its propositions. Raw empiricism has committed the error of supposing that because rational science is utterly independent of observation, empirical science must conversely be utterly independent of theory or analysis; or what is a worse error, that theory or analysis in an empirical science results solely from observation.

The scientific method which is exemplified in the empirical physical and biological sciences is not that of raw empiricism. An examination of the work of those empirical sciences reveals the interplay of analysis and investigation which we have insisted upon as the basic, indispensable trait of empirical scientific method.¹⁸

¹⁸We have employed the physical sciences as examples of well constructed and well developed empirical sciences. This does not mean that they are entirely free from the methodological errors that are found in psychology and sociology, or that there is not a great deal of insignificant research in physics, chemistry, etc., but most important of all, it does not mean that what a physicist or a chemist, for example, writes about science and scientific method is to be taken as authoritative because of the author's contribution to the knowledge in his field. Quite the contrary in many cases. Thus, P. W. Bridgman's *Logic of Modern Physics*, F. Barry's *The Scientific Habit of Thought*, and J. S. Haldane's *The Sciences and Philosophy* are examples of erroneous and inadequate analyses by men who have made eminent contributions to the sciences of physics, chemistry and physiology. Bridgman and Barry, especially, represent the same type of raw empiricism in their conception of science, which prevails in psychology and the social sciences. Bridgman's 'operational point of view' is in part an extremist and doctrinaire development of the pragmatism of C. S. Peirce, and in part an unwarranted generalization of a heuristic principle first formulated by Einstein in the course of the development of the theory of relativity. A man's competence as a theoretical or experimental physicist ought not prevent us from questioning his technical competence as a philosopher and logician. It is the latter and not the former kind of competence which is indispensable to a correct analysis of science and scientific method. Finally, it should be added that physics is a good empirical science, not because physicists as a class have a clear understanding of the nature of science and scientific method, but because the techniques of theoretical and experimental work in physics are so explicitly developed that they can be imparted to the prospective physicist in the course of his training. Since their origin in the seventeenth century these techniques have constituted an almost fool-proof heritage for succeeding generations of investigators. Their origin in the seventeenth century is in large part due to the philosophical endowments, as well as the genius, of such men as Descartes, Leibnitz, Galileo and Newton. If contemporary social scientists had a similar heritage, it would not be necessary for them, as it is not now necessary for physical scientists, to understand the nature of science.

We are now prepared to ask the question is an empirical science of criminology possible? An affirmative answer to this question implies that we can give an affirmative answer to the question can methods of empirical science be applied to the subject matter of criminology? It is our position that affirmative answers to both questions can be maintained. To show this, we shall consider the reasons which have been advanced in support of the thesis that an empirical science of criminology is not possible because of the nature of its subject matter.

If by science is meant no more than descriptive knowledge, or if by scientific method is meant no more than processes of observation, it is obvious that affirmative answers must be given to these questions. The negative position can, therefore, be understood only in terms of the conception of science and scientific method which we have attempted briefly to indicate. The negative position must be that it is impossible, for one reason or another, to develop an empirical science of criminology which in all essential respects will be like such empirical sciences as physics, chemistry, physiology and genetics.

One reason which is given for this negative position is that the subject matter of criminology, like that of all the other so-called social sciences, has intrinsic properties which make it incapable of being constructed as an empirical science. What these intrinsic properties are, is never clearly stated. It is suggested that social phenomena are more complex than physical or biological phenomena; it is suggested that social phenomena are intangible, evanescent and elusive; it is suggested that social phenomena are always relative to the date and place of their occurrence. But what is felt to be the greater complexity of social phenomena is nothing more than a lack of any clear analysis of them. Prior to the existence of physical science, or to the untutored mind even now, physical phenomena must seem as complex as social phenomena. The intangibility and elusiveness of social phenomena is merely a function of our lack of skill and ingenuity in devising techniques of precise observation. The relativity of social phenomena to date and place is a result of the confusion of an historical

with a scientific approach to them. Had we a proper analysis of these fields we would see that time and space are variables like any other variables which we employ, and that we do not have to deal with particular dates and places.

Another reason given is that the physical and biological sciences can be experimental because of the nature of the material with which they deal. It is thought that sciences cannot be constructed in fields where experimentation is intrinsically impossible. This is a patent error in analysis. Experimentation is merely one of many techniques of observation. It is not the *sine qua non* of exact empirical science. This can be illustrated most effectively by pointing to relativity physics which is for the most part non-experimental in the simple sense in which experiment means working with materials which can be manipulated in a laboratory. There are many other instances in both the physical and biological sciences of scientific work which is non-experimental in this narrow sense of experimentation. More broadly, experimentation can be taken to mean any kind of directed investigation, that is, observation directed by a specific problem in such a way that the observational findings can be employed in the inductive establishment of the probability of a generalization. In proportion as research is incapable of performing laboratory experiments in the narrowest sense of that term, its observational data must be developed by elaborate statistical and mathematical calculations. It is sufficient here for us to emphasize the unquestionable fact that the basic trait of empirical scientific method, namely, its use of empirical evidence to determine the probability of generalizations, is not at all dependent upon opportunities for laboratory experimentation.

Another reason urged is that it is possible for the physical and biological sciences to be metrical, and thus to achieve quantitative data, whereas this is impossible with respect to social phenomena. There are a number of errors involved here. In the first place, it is falsely supposed that a science is exact because it is quantitative, whereas the reverse is the case; science cannot be quantitative unless it is exact. Thus, taxonomic botany and

qualitative chemistry are exact sciences and at the same time non-quantitative. The second error is the supposition that certain kinds of phenomena are capable of being measured whereas other kinds are not. The processes of measurement are too varied and too complex to be adequately discussed in this context. They range from simple counting of instances of a defined class to the experimental measurements made by physicists. In the absence of a satisfactory account of the nature of measurement, it must suffice to say that there are no phenomena capable of being precisely observed which cannot be measured. Wherever measurement is impossible, precise observation is impossible. It follows, therefore, that if the observation of social phenomena cannot be metrical, neither can it be sufficiently accurate to be worth anything for scientific use. To say that measurement of social phenomena is impossible is equivalent to saying that they are incapable of analysis and that a field of social variables cannot be defined.

None of the foregoing reasons justifies the position that an empirical science of criminology is impossible. That one does not now exist is no reason for maintaining that one cannot exist, particularly when its non-existence is so clearly attributable to obvious defects in the methods and procedures of the investigators who have been doing work in this field. But the contrary position, that an empirical science of criminology is possible, must not be misunderstood to mean that it will ever come into existence, because that eventuality depends also upon improvements and changes in methods in the fields of psychology and the so-called social sciences. These improvements and changes may, of course, never occur. In that event there will never be an empirical science of criminology since no amount of research of the kind which has been done and which is now being done in these fields will ever result in the establishment of empirical sciences.

The criticisms we are making of the raw empiricism of criminological research are frequently met by two defenses of that kind of work, which are not advanced, however, as reasons for the impossibility of an empirical science of criminology. The

first is that criminology is a young enterprise among the sciences. The same defense is made for psychology and sociology. What this must be taken to mean is that either (1) after much more time and work are spent in the collection of descriptive materials, it will be possible to begin scientific research or (2) that by the mere continuance of the kind of work which is now being done, an empirical science will suddenly be produced out of this mass of descriptive knowledge. We have already answered this second point; let us turn to the first. The history of all of the empirical sciences shows that immaturity is a poor excuse for insignificant and inconclusive descriptive work. An examination of the origin of the sciences of dynamics and optics in the seventeenth century, and of the sciences of electricity and physiology, thermo-dynamics and genetics, in the nineteenth century, shows that at the beginning of scientific work in these fields theory and analysis cooperated with observation and investigation, and that there was no prior period of extended accumulation of merely descriptive knowledge. The social sciences are immature not because of the shortness of time during which men have worked in these fields, but rather because of their incompetence for scientific work. A science comes into existence not as the result of a long period of incubation, but as a result of man's analytical powers, on the one hand, and his inventiveness and ingenuity in the contrivance of techniques of investigation whereby to apply his analysis to experience, on the other.

The second defense is that all science is not exact science and that the kind of science which is possible in the field of criminology is essentially different from the kind which exists in physical and biological fields. This position is entirely unsupported by any analysis of science whatsoever. Empirical science is either exact or it is not science. What is meant by exact science has already been briefly indicated by the essential traits of empirical science above enumerated. What those who hold this position usually mean is either (1) that it is proper to call descriptive knowledge science or (2) that an exact science deals with certainties rather than probabilities. Both of these positions are clearly untenable.

To call descriptive knowledge by itself science is a confusion of the nature of science with the nature of history. To hold that only descriptive knowledge is possible in the field of criminology is to deny the possibility of an empirical science of criminology. To suppose that the conclusions of exact empirical science are certainties is to confuse empirical science with rational science. We have already shown that the propositions of an empirical science can never be established as more than probable in the light of empirical evidence. All that the word exact means as applied to empirical science is that its terms are precisely defined and related to each other by general propositions which are capable of being evidenced because the definition of the constituent variables makes valid and significant observation possible. The adjective exact, therefore, summarizes the basic traits of empirical science.

As the result of our discussion of the nature of empirical science and of our enumeration of the requirements of scientific research, we have concluded that an empirical science of criminology is possible and that scientific work can be done in this field. In this section we have also attempted to show that one reason for the failure of criminological investigation to achieve scientific conclusions has been an inadequate conception of the nature of science and of the requirements of scientific research. Holding that it is possible for scientific work to be done in criminology, we do not, however, immediately proceed to recommendations of ways and means for its accomplishment. There is still another reason for the failure of criminological research, a reason which leads us to the conclusion that whereas a science of criminology is possible, it is not possible at present. We shall discuss this point in the next section. Before we do so, however, it may be well to reiterate one implication of the arguments which have been considered in this section. Unless a science of criminology and scientific work in criminology are possible, etiological problems with respect to the phenomena of crime must forever remain insoluble, and any hope which we may have that by the application of knowledge we may some day be able effectively to control and prevent the

occurrence of criminal behavior, must, if we are intellectually honest, be recognized as empty and futile.

Section 3. The Prerequisites of a Science of Criminology.

In the preceding section we distinguished between independent and dependent empirical sciences. By an independent science we mean a subject matter which is analyzed into a set of variables which as a set are not found in any other science. By a dependent science we mean one which consists in a set of variables some of which are borrowed from two or more other sciences. To those borrowed variables new variables, which occur only in the dependent science, may be added. Its status as a dependent science consists in the fact that some of its variables are borrowed from another science. Thus, physics and chemistry, physics and biology, chemistry and physiology, are sciences independent of each other, whereas physical chemistry, biophysics and physiological chemistry are dependent sciences. In each case the sciences upon which these hybrid sciences depend are indicated by their names. Furthermore, it is clear on logical grounds, and substantiated by the history of the sciences, that dependent sciences cannot exist or be developed unless the two or more independent sciences from which they borrow variables, exist and are developed. Thus, physiological chemistry must be logically posterior to, and historically antedated by, the empirical sciences of physiology and chemistry.

The theses which we shall here maintain are: (1) that psychology and sociology are independent subject matters; (2) that criminology is a subject matter dependent upon the subject matters of psychology and sociology; and (3) that, therefore, the existence and development of empirical sciences in the fields of psychology and sociology are necessarily prerequisite to the existence and development of an empirical science of criminology.¹⁹

¹⁹To oppose the first of these theses, it is necessary to maintain that psychology and sociology are not independent subject matters. If they are not independent, one of them must be dependent on the other, or they must constitute a single subject matter, namely, human behavior; in the latter case criminology must be a department of this single subject matter, that is, criminal behavior. We shall show that human behavior is necessarily the subject matter of a dependent science, and that human

That the subject matter of criminology is dependent upon the subject matters of psychology and sociology is apparent from the variables which have been employed by quantitative researches in criminology. These variables consist either of aspects of human nature or of aspects of man's environment. They fall into four groups: (1) physical aspects of man's environment; (2) social aspects of man's environment; (3) physiological aspects of human nature; (4) psychological aspects of human nature. This may mean that the subject matter of criminology is dependent upon more than two other subject matters. For the sake of brevity and clarity we shall restrict this discussion, however, to the dependence of criminology upon psychology and sociology, which appear to contribute the largest number of variables to be found in criminological research.

Whereas it is apparent from the literature of criminology that its subject matter is dependent upon the subject matters of psychology and sociology, the literature of psychology and sociology does not reveal a conception of these two subject matters as mutually independent. The contrary is rather the case. For the most part the subject matter of sociology has been confused with that of psychology, and the subject matter of psychology has been erroneously conceived as human behavior. We can indicate this confusion within the scope of this discussion only by presenting a brief analysis of the subject matters of psychology and sociology, which exhibits them as completely independent of one another.

To begin with, the subject matter of criminology is criminal behavior. The study of criminal behavior is, of course, merely a department of the study of human behavior in general. The study of human behavior must take into account both human and environmental variables. We have seen that an etiology of criminal behavior must take into account both human and environmental variables. Our point then becomes simply this: *Either* the human variables are independent of the environmental variables, in which case psychology and sociology are independent sciences; *or*, if

behavior is the subject matter of neither psychology nor sociology, which are independent of each other.

the human variables and the environmental variables cannot be studied separately, then psychology and sociology not only are *not independent sciences* but they are a single science having a single subject matter. If the latter is the case, then criminology is not a dependent science, since it cannot be dependent upon psychology and sociology unless they are themselves independent of each other; criminology becomes merely a department of the science of human behavior, which can be called either psychology or sociology, if these two names can be taken indifferently to refer to a single science composed of a single set of variables.

The independence of psychology and sociology of each other, therefore, turns upon the question whether human and environmental variables, such as those indicated by the literature of criminology, form a single unified set of variables, the members of which are inseparable from one another, or whether they comprise two quite separable sets of variables which constitute different subject matters and which have been borrowed by criminologists for use in the study of criminal behavior. Our position is that psychology is a study of variables which result from an analysis of the generic concept *man*; and that sociology is the study of variables resulting from an analysis of the generic concept *man's environment*.²⁰ These two generic concepts are not co-variables; they are independent of each other; as a result of their independence, the two sets of variables produced by the analysis of these two generic concepts are necessarily independent of each other. All the variables within each of these sets must be co-variant with respect to each other, but the variables in one set are not necessarily co-variant with the variables in the other set. The co-variance of human with environmental variables can only result from the construction of a dependent science of human behavior which takes some of the variables from each of the two sets and formulates their co-variation with each other.

In other words, we hold that the study of human behavior is not the subject matter of either psychology or sociology. The prevalent confusion of these two fields with each other, and with

²⁰One science can be distinguished from another only in terms of different generic concepts which differentiate their subject matters.

the study of human behavior, has been one of the chief factors responsible for the failure of knowledge in either of these fields to achieve the form and status of empirical science. In order to make the foregoing analysis clear we shall now attempt a brief examination of the kind of knowledge to be found in the fields of psychology and sociology. We shall furthermore attempt to illustrate what we mean by the independence of psychology and sociology by reference to economics as an empirical science of *man's environment*²¹ which is independent of psychology, and to psychometrics as, in inception at least, an empirical science of *man* entirely independent of any study of *man's environment*. It will be seen that neither the subject matter of economics nor that of psychometrics is human behavior; the former is the study of a set of variables produced by an analysis of the economic aspects of *man's environment*; the latter is the study of a set of variables produced by an analysis of psychological, and not physiological, aspects of *human nature*.

An empirical science of psychology does not exist.²² With the exception of psychometrics, which we shall discuss presently, the knowledge which has resulted from psychological researches is either descriptive, quantitative or non-quantitative, or, if not merely descriptive, knowledge which belongs properly to the subject matter of physiology and not to that of psychology. The study of *man qua animal* is the subject matter of human physiology. Either the subject matter of psychology is independent of the subject matter of physiology, or there is only one science of *man*. It seems clear that human nature can be analyzed into a set of variables none of which are physiological. The work which has been accomplished so far in psychometrics is evidence of this. The subject matter of psychology is *man qua man* and is thus distinguished from the subject matter of human physiology. Exclud-

²¹*Man's environment* can be the subject matter for a number of sciences which deal with specifically different aspects of man's environment. Thus, economics deals with the economic aspects, sociology with the socio-political aspects, etc. Physics and chemistry are not sciences of *man's environment*, *man* is not a constant in physics and chemistry as in economics and sociology.

²²Striking evidence for this is afforded by C. Murchison's *Foundations of experimental psychology* (Worcester, Mass.: Clark University Press, 1929), in which more than half the material presented is physiology; and by G. Murphy's *Experimental social psychology* (New York: Harper & Bros., 1931). The latter book is a monumental compilation of trivial and patently insignificant research.

ing, therefore, all researches by psychologists which have contributed knowledge to human physiology, what remains is a large mass of descriptive materials which do not have the form or status of empirical science.

What we have called psychometrics is a body of researches which satisfy the minimum requirements of scientific work.²³ The variables which psychometrics employs are all psychological. Its observational work is directed toward testing generalizations formulated either statistically or mathematically. Psychometric theory is still relatively undeveloped. Nevertheless, the importance of theoretical analysis is recognized and this indicates that in this small group of researches, at least, there is none of the raw empiricism which prevails throughout the rest of psychology.

It may be objected that the literature of psychology does contain theoretical analyses of human nature and that empirical research has been directed by these analyses. Critical examination, however, shows that this is not the case. The general propositions which can be found in psychological literature are either theorems in a rational science of psychology or common sense generalizations, disguised by the specious technical language in which they are stated, or opinions which have insufficient basis in empirical evidence. What is called theory in psychological literature is speculation and not analysis.²⁴ Furthermore, the experimental investigations of behavior which have been carried on by psychologists have never been directed by what are *supposed* to be the theoretical propositions of psychology. The strongest

²³Psychometrics must be distinguished from the experimental study of behavior and the experimental study of mind. Work in psychometrics was begun by Galton and Cattell, and is today carried on by Thorndike, Spearman, Stern, Thurstone, and others. For a discussion of the failure of 'experimental psychology,' see E. G. Boring, *A history of experimental psychology*. New York: The Century Co., 1929, Ch. 24.

²⁴The one exception is the theory of Freudian or psychoanalytical psychology. Freudian literature contains a well-developed analysis of human nature. But this analysis is not used to direct empirical researches; it is used to interpret (diagnose) and to organize the materials of case histories. It is the kind of theory which is indispensable to the writing of history. Psychoanalytical psychology is both a theory of human biography and historical knowledge of a vast number of human biographies collected in recorded and analyzed case histories. The concepts of psychoanalysis may be useful in the development of an empirical science such as psychometrics. Psychoanalysis provides insights which may direct the formulation of problems for empirical research. The discussion of criminal behavior in Alexander and Staub's *The Criminal, The Judge and The Public* illustrates the kind of contribution which psychoanalysis can make.

indications that the methodology of experimental psychological research is defective are (1) that the great mass of data resulting from observation and measurement has not yielded a single significant conclusion and (2) that it has never been assimilated by any of the so-called *theories* competing in the field.

The failure of psychological research is due, first, to the same kind of misconception of the nature of science and scientific method which the literature of criminology exemplifies, the misconception which we have called raw empiricism; and, second, to the lack of definition of the subject matter of empirical psychology. This second factor is responsible for the large amount of research in physiology which has been performed by psychologists, for the confusion of empirical with rational psychology, and for the attempt to study human behavior prior to the establishment of an empirical science of man. Psychometrics is exceptional in that it is independent of physiology and rational psychology, and is not a study of human behavior. Furthermore, psychometrics shows that an empirical study of man's nature is independent of an empirical study of man's environment. Environment is not one of the variables produced by an analysis of man. It is a constant in psychological research.²⁵

An empirical science of sociology does not exist. Sociological investigations have yielded the same kinds of descriptive knowledge which are to be found in the literature of criminology. There is not a single scientific proposition in the field of sociology which has been established as a conclusion from empirical evidence. The general propositions which can be found in sociological literature are either common sense generalizations, disguised by a specious technical vocabulary, or speculative opinions. What is called theory in sociology is speculation and not analysis. There is no relation between these speculations and the empirical researches which have been accomplished.

The failure of sociological research, like that of psychological research, is due, first, to raw empiricism, and, second, to a confu-

²⁵To treat *environment* as a constant means (1) that the term is treated as unanalyzed and (2) that it is not treated as a product of the analysis of a more generic concept.

sion of the proper subject matter of sociology with a subject matter which is dependent upon the prior existence of sociology and psychology, namely, the etiology of human behavior. The subject matter of sociology must consist in a set of variables which are an analysis of the social aspects of man's environment.²⁶ It is obvious that man is not one of these variables. Man is not a product of an analysis of man's environment. Just as environment must be a constant in psychological research, so man must be a constant in sociological research. The study of human behavior, which involves the co-variation of man and man's environment, is properly the subject matter of a dependent science which can be called social psychology or given any other name which indicates the dependence of the study of human behavior upon the prior independent sciences of psychology and sociology.

There is only one existing empirical science which has for its subject matter the study of man's environment. We refer to this science merely to show that a study of man's environment is completely independent of a study of man. The science to which we refer is mathematical economics, which must be distinguished from descriptive economics. The latter term refers to a body of knowledge which is descriptive in character and which represents the same kind of confusion of economics with psychology that is to be found in sociological literature. Descriptive economics is an attempt to study human behavior, even though the prerequisite empirical science of psychology does not exist. But mathematical economics is truly an empirical science of man's environment, differing from the subject matter of sociology in that its variables are the result of an analysis of the economic aspects of man's environment. Mathematical economics, like psychometrics, exhibits none of the methodological defects which we have summarized by the phrase 'raw empiricism'. Researches in this field have succeeded in submitting scientific propositions to empirical evidence; these researches have been directed by problematic propositions formulated by theoretical analysis. While mathematical economics is at present better developed than psycho-

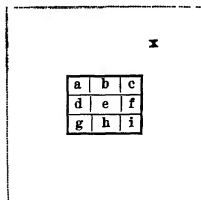
²⁶It is highly questionable that 'sociology' and what is called 'political science' be independent of each other.

metrics, it is still fragmentary and incomplete with respect to the field of economic phenomena.

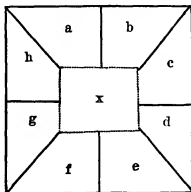
That a study of man's environment is independent of psychology, and is not a study of human behavior, can be illustrated by the consideration of a single proposition taken from mathematical economics. We can formulate the demand function as follows: "Demand for any article in a given interval of time is a function not only of its price but of the prices of all other articles at that time". The evidence in terms of which this proposition can be tested does not include any knowledge of human nature. The proposition is independent of any proposition in psychology. All propositions in mathematical economics are of the same sort. *Man* in economics is the constant *economic man* who has a *demand* for an *article* and pays a *price* for it. The relation between *demand*, the number of *articles*, and the *price* paid for any article is a function of these three variables exclusively. This is what we mean by saying that man is a constant and not a variable in any science which, like mathematical economics, is a study of man's environment.

We can summarize, and perhaps clarify, the foregoing discussion by means of a simple diagram which shows the independence and the relation of the subject matters of psychology and the various social sciences.

A Psychology



A Social Science



In the above diagram the letter *x* represents whatever is held constant; the letters *a*, *b*, *c* . . . represent variables. In a science of psychology, *x* represents the environmental constant and *a*, *b*, *c* . . . are the psychological variables derived from an analysis of man. In a social science, whether it be sociology or economics, *x* represents the human constant and *a*, *b*, *c* . . . are the environmental variables, differing of course according as the social science is sociology or economics. It is important to note that the fields of psychology and the social sciences are congruent. What is analyzed into a set of variables in one field is treated as a constant in the other, and conversely. The psychological variables are co-variant with each other but not with the environmental constant. The environmental variables are co-variant with each other but not with the human constant. That the constant in one field is analyzed into variables in the other, and conversely, indicates the possibility of a dependent science of human behavior, which will select some of the psychological variables and some of the environmental variables and attempt to formulate and investigate their co-variation with each other. It must be obvious that this latter science cannot be constructed unless and until the independent sciences, which are to be correlated, already exist and are sufficiently developed to be thus used.

Criminological research, in so far as it seeks to answer etiological questions, is a study of human behavior, and more particularly of criminal behavior. A study of criminal behavior may precede a study of other types of human behavior, but it cannot precede scientific development of the subject matters upon which any study of human behavior must depend. We concluded in the previous section that an empirical science of criminology is possible. We must here conclude by qualifying that possibility. An empirical science of criminology is not at present possible because no empirical sciences of psychology and sociology now exist. Criminological research, which we shall survey in subsequent chapters, not only exhibits raw empiricism but also represents an attempt to do the impossible.

Criminologists have proceeded with the study of human behavior in the complete absence of the two bodies of scientific knowledge which are prerequisite to such a study. Whether or not an empirical science of criminology will be developed in the future depends upon whether or not the empirical sciences of psychology and sociology will be created. The same reasons which we advanced for the possibility of scientific work in criminology hold even more clearly for the subject matters of psychology and sociology. But although they are possible, it can be predicted that empirical sciences will not be constructed in the fields of psychology and sociology unless the raw empiricism which now dominates the methods of research in these fields is replaced by a correct conception of the nature of science and scientific method, and unless the confusion of subject matters which now prevails is eliminated by theoretical analysis which will establish their independence.

In subsequent chapters we shall review the results of criminological research. In order to undertake a critical examination of these researches we must treat them *as if* a science of criminology were at present possible, *contrary to our conclusion that that is not the case*. Even though much of the work which has been done has not been directed by even vaguely conceived problems, we shall treat all of it *as if* it were directed. If we did not make these two assumptions, we could do no more than criticize the results of these researches with respect to their reliability and accuracy as descriptive knowledge. Even though it should now be clear that significant scientific conclusions cannot at present be achieved by criminological research, it will nevertheless be instructive to criticize the findings in detail for their lack of significance. The methodological defects of raw empiricism and the confusion of the subject matters of psychology and sociology will thus be concretely exemplified.

We repeat that our evaluation of the results of criminological research is not based merely upon the rigorous standards of scientific work. The urgency of the practical problem of the control of the phenomena of crime requires us to evaluate knowledge in

terms of its usefulness in the solution of this problem. To say that criminological research has resulted only in descriptive knowledge means, first, that it fails to satisfy the requirements of empirical science, and, second, that it has made no useful contribution to the solution of our basic practical problem. The inutility of descriptive knowledge with respect to the control of phenomena is one of the clearest lessons to be learned from the history of the sciences. Man's technological power, whether it be in engineering or in medicine, is directly proportional to the degree to which he has achieved empirical sciences in the fields of physical and biological phenomena. The nearer a body of knowledge approximates the ideal form of empirical science, the more useful it is in practical application. The urgency of the practical problems of crime impels us, therefore, to seek their solution not by the kind of research which has so far prevailed in criminology, but by an effort to create empirical sciences of psychology and sociology in the hope that when these prerequisites have been satisfied, we shall be able to proceed to an etiology of human behavior.

Chapter V

RESEARCHES IN CAUSATION

Section 1. Preliminary Discussion: Problems and Methods.

Considered most generally, the problem of the causation of crime includes the problem of the efficiency of methods of treating offenders and the problem of the efficiency of other means, both official and unofficial, for preventing the occurrence of criminal behavior. Criminological researches fall naturally into three groups: (1) those which are concerned with the problem of treatment; (2) those which are concerned with the problem of prevention; (3) those which are concerned with what can be called the problem of causation. In this last group the word causation is being used in a restricted sense to exclude the etiological questions included under the heads of treatment and prevention. Since this and the two subsequent chapters will attempt to survey researches in causation, treatment and prevention, it is advisable here briefly to repeat the distinctions involved in the use of these three rubrics.

Distinction can be made between the problem of causation and that of treatment in terms of the distinction between potential and actual criminals. We are interested in knowing both why potential criminals become actual criminals and why actual criminals become recidivists. The first question roughly states the problem of causation; the second, the problem of treatment. The problem of treatment can also be formulated in terms of questions about the reformative and deterrent effects of various modes of treatment. It is clear that both of these groups of researches are attempts to answer etiological questions. In that sense both have to do with causation.

The problem of prevention can be distinguished from the problem of treatment by reference to the distinction between the administration of the criminal law as a preventive device and

other preventive measures. The problems of prevention and of causation can be distinguished by formulating them as questions. If the problem of causation is formulated in terms of the question why do *some* potential criminals become actual criminals, the problem of prevention can be formulated in terms of the question why do not *all* potential criminals become actual criminals. In other words, studies of prevention are attempts to discover the factors which restrain potential criminals from becoming actual criminals, and are thus distinguished from studies of causation which are attempts to discover the factors responsible for the occurrence of criminal behavior.

This tri-partite division of problems and researches in criminology is, of course, somewhat artificial and arbitrary. It is only for purposes of clarity of analysis and convenience of discussion that we shall subsequently consider the problems of treatment and prevention apart from the problem of causation. However, their separate treatment should not be permitted to obscure the essential unity of these problems or the great complexity of the phenomena with which they are concerned. It would be unfortunate if our discussion of these problems separately should obscure their relationship or give the impression that any factors entering into criminal behavior can be considered in isolation. It would be especially unfortunate if the impression should be created that any method of treatment or any preventive measure can be considered apart from other factors in the causal background. It is important to realize the tremendous complexity of the problem which confronts the analyst who seeks to disentangle the causal influence of some method of treatment or of some preventive measure and to relate it as a causal factor to the rest of the causally significant factors.

In this section we shall undertake a discussion of the techniques of criminological research. This discussion is preliminary not only to investigations in causation but also to those in treatment and prevention. The fact that each of these three problems is a phase of the general problem of the etiology of crime, and the fact that empirical studies of these problems employ the same

techniques, make this preliminary discussion applicable to all three.

In the previous chapter we distinguished between quantitative and non-quantitative knowledge. The survey of criminological research which is presented in this and in subsequent chapters is restricted to a summary and criticism of investigations which have resulted in quantitative findings. There are a number of reasons for this limitation. In the first place, investigations which result in narrative reports or descriptions cannot be summarized or compiled. In the second place, their validity cannot be evaluated. In the third place, they are incapable of yielding answers to etiological questions. Even if they could be summarized and even if some estimate of their validity could be made, the relevance of these investigations to problems of causation, treatment and prevention would be too remote to warrant a detailed consideration of them.¹

The distinction between findings of research which are expressible in quantitative form and those which are not, must not be confused with another distinction which we have already made, namely, that between descriptive and scientific knowledge. Quantitative knowledge may lack generality, which is one of the essential traits of the scientific proposition. Quantitative knowledge, like non-quantitative knowledge, may be merely descriptive. But the fact that knowledge is descriptive does not prevent it from serving a function which is indispensable in the development of an empirical science. If descriptive knowledge satisfies certain requirements, it can be used as a basis for inference or as evidence in terms of which it may be possible to determine the probability of a generalization. In other words, what we have previously called the empirical base upon which a body of general propositions rests, consists of descriptive knowledge. Propositions of

¹The one exception to this statement is with respect to descriptions of various methods of treatment and of various preventive measures. Non-quantitative knowledge of the characteristics of the various procedures and institutions employed in the treatment of offenders and in efforts to prevent crime is indispensable to a study of the effects of these procedures and institutions. But even in this one exceptional case, which we shall discuss more fully in succeeding chapters, it will be seen that it is practically impossible to summarize within the scope of this book such knowledge of this sort as we have.

descriptive knowledge report the evidence obtained by observation and measurement, which constitutes the data of research. We shall, therefore, be concerned in this chapter with the quantitative descriptive knowledge produced by criminological research, in order to determine its validity in the first place, and its scientific significance in the second.

It is necessary here to recall the conclusions of the preceding chapter: first, that no scientific knowledge exists at present in the field of criminology; and, second, that in the present state of psychology and sociology it is impossible for scientific work to be done in criminology. We shall nevertheless survey the researches which criminologists have completed *as if* they could be considered as attempts to obtain evidence useful in the solution of the etiological problem. By this we mean that we shall treat the quantitative findings as data to be employed as a basis for inference. It is only by considering the findings in this way that we shall be able to criticize them with respect to their significance as well as with respect to their validity. In many cases the investigators did not plan and execute their research in the light of any problem. In other cases the investigators had vague formulations of problems toward the solution of which they directed their labors. We shall call the former type of research exploratory, to distinguish it from the latter type, which we shall call directed research. Even though scientific research in criminology is at present impossible, directed research more nearly approximates the form of scientific research than that which is exploratory. For our present purposes, however, we shall consider all quantitative findings *as if* they were the results of directed research. It will later be seen that the complete insignificance of most of the knowledge which is reported is due to the fact that it resulted from exploratory investigations. That none of the knowledge reported is conclusively significant is due to the fact that even the directed research in this field was directed by vague and inadequately formulated problems. Since no theory or analysis yet exists in the field of criminology, it could not have been otherwise.

Since we shall attempt to treat all the researches we are about to survey as if they were directed, it will be necessary to formulate briefly the problems which could have directed them. Since we shall attempt to estimate the validity and the significance of the data achieved by these researches, it will be necessary also to state the criteria in terms of which such judgments can be made. We shall then be prepared to describe the specific methods of research.

The problems we are about to formulate have already been stated in the previous chapter. We shall restate them here in such a way as to emphasize the direction they have given to investigations in the field of causation. These problems are unfortunately not specific; they do not consist in questions based upon problematic propositions to be found in a theory or an analysis of the phenomena of crime. The major problem can be stated in the question: can criminals be differentiated from non-criminals? The differentiation will, of course, have to be made in terms of one or more factors. The question can therefore be reworded as follows: what factor or factors differentiate criminals from non-criminals? This latter phrasing of the question must not be permitted to obscure the fact that at present we do not know whether criminals can be differentiated from non-criminals in any way whatsoever except by reference to the criminal law.*

In the light of this general question we can, of course, take any given factor which may be suggested and ask with respect to

*The subject matter of criminology is, as we have said, criminal behavior. As we have suggested, some basis for sharply differentiating criminal behavior from non-criminal behavior and criminals from non-criminals is a *sine qua non* of the development of the science of criminology. As we have pointed out, it seems impossible to make this differentiation except in legal terms. However, one of the crucial problems which confronts the criminologist is whether this manner of differentiating criminals from non-criminals is significant for his purposes. If it is not, he will have to discover some other basis of differentiation which is significant or abandon his attempts to construct a science of criminal behavior. Moreover, it is important to observe that the behavior which is prohibited by the criminal code takes multitudinous forms. It ranges from such conduct as spitting on the sidewalk, smoking in the subway, shaking a mop out of a window and driving on the wrong side of the street, on the one hand, to such conduct as murder, arson and burglary, on the other. Obviously criminal behavior is not homogeneous. The question thus arises whether the criminologist should not seek the causes of specific types of criminal behavior rather than the causes of crime in general. See the discussion of a related point in the Preface, *supra*.

it whether or not it differentiates criminals from non-criminals. Problems can be similarly formulated with respect to two factors or with respect to groups of more than two factors. Even if questions of this sort were at present answered, it must be clear that the answers would not constitute solutions of the etiological problem. It is for this reason that we have said that we are not able to formulate etiological questions precisely and that the best we can do is to indicate the vague, general questions which can be considered as objectives of the researches to be surveyed.

A few subordinate problems can also be formulated. Can various sub-groups of criminals, classified according to the kinds of crimes which they have committed, be differentiated from each other? Can any one of these sub-groups be differentiated from non-criminals? Are there some sub-groups of non-criminals which are distinguishable from other sub-groups of non-criminals in that they can be differentiated from criminals or can be differentiated from some sub-groups of criminals? All of these problems are of the same sort; they are all concerned with the differentiation of groups of individuals in order to discover what factors correlate with criminality or a given type of criminality.

The researches we are about to survey have not even attempted to answer all of these questions. Most of them have been directed by the first problem formulated above, namely, the differentiation of criminals from non-criminals. A few researches have been directed toward the problem of differentiating various types of criminals or of differentiating a given type of criminal from non-criminals. No researches have attempted to differentiate criminals or various types of criminals from some but not all types of non-criminals.

The foregoing research problems indicate that the researches which can be considered as directed must always consist in the study of factors which can be correlated with criminality or some type of criminality. These factors are either traits or aspects of human nature, or they are characteristics of, or elements in, human environment. For the sake of brevity we shall call the first group human factors and the second, environmental factors.

The nature of the foregoing problems indicates the kind of answers which investigations directed by them must give, since the problems require the differentiation of groups of individuals by reference to characteristics possessed by one group and not by another. The answers must take the form of one or another type of statistical index of correlation. The raw data achieved by observational processes cannot constitute answers to the questions which have been stated. These data must be treated statistically. Their statistical treatment may yield conclusions which answer the questions which directed the gathering of the data.

We shall for the time being assume that the data are capable of being treated by statistical processes; that is, we shall assume their validity as products of observation and that they are of such a character that they can be used in some type of statistical inference. If the data are not capable of giving rise to statistical inferences, they remain merely information about some definite group of individuals which has been observed or measured. Whatever value such quantitative descriptive knowledge about a definite group of individuals may have, it is obviously inadequate if we are interested in answering questions such as we have asked. As the phrasing of these questions indicates, they require research to differentiate criminals from non-criminals, not a particular group of individuals who are criminals from another particular group of individuals who are not criminals.

However, we repeat that although the answers to the questions which have directed criminological research are necessarily statistical conclusions in the form of indices of correlation, they are not answers to questions of etiology. This point reiterates what has already been said, namely, that the problems which have directed criminological research are inadequate. If regarded from the point of view of the etiology of crime, they are at best crude preliminary questions.

A single coefficient of correlation by itself does not state the functional dependence of one variable upon another variable, or upon a group of variables. It is a symmetrical relation which measures the interdependence of two variables, but this relation-

ship must be known to exist independently of the coefficient of correlation.⁸ Furthermore, while a single coefficient of correlation measures the relationship of two variables, it does not relate them to other variables to which they may in fact be related. This can be done only by an elaborate statistical analysis which involves the intercorrelation of a set of correlations, partial and multiple correlations. In short, single coefficients of correlation are almost insignificant. Even the regression equation must be interpreted in the light of independent knowledge.

The findings of criminological research, when they are capable of being interpreted at all, have an extremely limited significance, which is manifested in the nature of the problems by which they are directed. As we shall see, the findings cannot be used even to solve these problems. It is important, however, to remember that were these problems solved, their solution would be only a slight step toward answering questions of etiology. The researches themselves reveal a large number of factors treated *as if* they were relevant variables. But the research findings do not enable us to tell which of these factors are relevant and which are irrelevant. The selection of relevant variables and the elimination of irrelevant variables is an indispensable step in the solution of etiological problems. Let us suppose that we had enough knowledge to eliminate the factors which are not relevant as variables. It would then be necessary to discover the interrelation of the relevant variables and to determine the exhaustiveness of the set of variables being employed. A few investigators have recognized that these requirements must be satisfied in order to make etiological interpretations of their findings. They have attempted to distinguish major and minor factors, exciting and predisposing factors, and have recognized that certain factors may be allied, whereas others may exert counteracting influences on one another. These same investi-

⁸For an adequate discussion of the limited significance of the coefficient of correlation see G. Udny Yule, *An introduction to the theory of statistics*, London: Griffin & Co., 1927, Chs. IX-XII. Also F. C. Mills, *Statistical methods*, New York: The Macmillan Co., pp. 405-409, 514; and M. Ezekiel, *Methods of correlation analysis*, New York: John Wiley and Sons, Inc., 1930, Ch. 23.

gators explicitly appreciate that both human and environmental variables must be studied in any attempt to construct an etiology of criminal behavior. But for the most part, the research workers in the field of criminology have not even recognized why their findings are hopelessly inadequate.

We have classified the investigations reported in the following section as research in the causation of crime, but it would be a waste of time to examine the findings of these investigations for their etiological significance. They have none whatsoever. We classify them as researches in causation merely because the investigators have always conceived their work as having etiological significance. It will be found more appropriate and more useful to criticize these researches in the light of a more modest standard of accomplishment which is indicated by the questions by which they have been directed. Correctly conceived, they are merely attempts to discover whether criminals can be differentiated from non-criminals, what factors can be employed in this differentiation, whether certain types of criminals can be subordinately differentiated, etc. We shall do no more, therefore, than to evaluate the research findings in the light of this aim.

We are now prepared to enumerate and briefly to describe the various methods which criminologists have employed in order to obtain data which can be used in the solution of these problems of differentiation. The names we shall give these methods are somewhat arbitrary and not always entirely appropriate, but they will nevertheless serve as labels for purposes of discussion.

First, there is the test method. As the name suggests, it consists in the use of some kind of instrument whereby a human factor is recorded or measured. For example, a scale is a device for measuring an individual's height. A blood analysis is a device for detecting the presence or absence of certain glandular conditions. An intelligence test is an instrument for measuring a certain type of ability. A character test is a similar instrument. A questionnaire may be a measuring or a recording instrument; it is the former if there is some way of scoring the answers numerically; it is the latter if it can be used merely to register the

presence or absence of certain traits. In short, the distinguishing mark of the test method is that its data are obtained from observation aided by some instrument rather than from unaided observation. The test method is essentially the same whether used by a physiologist, an anthropologist, or a psychologist. And whether the test instrument measures or simply records, the data obtained are either numerical or can be denumerated, and in either event can be treated statistically.

Next, there is the case history method. No instrument is employed, although the questionnaire may be used as an aid in obtaining the case history. When the case history is obtained, however, it is studied directly and without the assistance of instrumentation. The investigator must, of course, know in advance what he is looking for in order to obtain data by an inspection of the case history. If he is a psychiatrist, he may be interested in what we have called human factors, traits or aspects of human character, the diagnostic significance of which he already knows or thinks he knows. Such factors are for that reason usually called symptoms, and the case history is treated by the psychiatrist as part of a clinical picture. If the investigator is a sociologist, he will usually be interested in discovering certain environmental factors in the biographical report. In order for him to discover and select these factors out of the case history he examines, he must have some prior definition and understanding of them. In this sense, they are like the symptoms which are significant in the light of psychological diagnostic schemata. The case history is seldom exhausted by the investigator; his use of it is highly selective. The factors which he selects for study in a given piece of research are chosen usually in the light of the particular problem which the investigator formulates for himself. The results obtained by the case history method are, of course, capable of being denumerated and of being treated statistically.

Finally, there is the census method. It is not a primary method of investigation, but rather a method involving the selection and manipulation of data obtained in prior investigations,

largely for the purpose of further statistical treatment. Thus, an attempt to correlate variations in the amount of criminal activity with the variations of prosperity in business cycles, is a use of the census method. The investigator makes no observations. The data which he employs are obtained from the observations of others.⁴

The census method may therefore be distinguished from the other two by its exclusively statistical manner; while the other two may lead to statistical processes and to the drawing of statistical conclusions, they are initially involved in gathering their own data. The factors which may be taken into account by the census method may be human or environmental variables. The census may be a denumeration of the presence, absence, or degree of presence or absence, of one or more human or environmental factors.

In terms of these three methods of research, we can now distinguish between the two major approaches which will be found represented in the investigations to be surveyed. Although, as we have shown in the previous chapter, the criminologist should be, strictly speaking, neither a psychologist nor a sociologist, but an investigator employing knowledge derived from both of these fields, criminological researches have for the most part been conducted either by psychologists or by sociologists. We can distinguish in general between the psychological and the sociological approach to the problem of differentiating criminals from non-criminals by reference to the kinds of factors studied. The psychologist is interested in what we have called the human factors, and the sociologist is interested in what we have called the environmental factors. This primary distinction reflects itself

⁴There is a verbal confusion arising from the popular connotations of the word 'census' which must be assiduously guarded against. According to current usage, the collation of more or less detailed data for a large group of individuals is a census. As we define it, a census is not dependent on the number of individuals, but on a certain order and division of labor in the observational and statistical processes. Practically, however, it is probably true that a method which utilizes other people's researches will be able to comprehend a greater number of cases than an original investigation would. This gives rise to a troublesome, yet without academic, question as to how to denominate unit research enterprise where one man statistically manipulates material originally gathered and summarized by one or more co-workers or subordinates engaged in psychometric testing, taking case histories, etc.

in differences in the use of methods of research. The psychologist uses either the test method or the case history method. The sociologist uses either the case history method or the census method.

It is necessary, therefore, to distinguish between the psychological and the sociological use of the case history method. Psychiatrists and psychoanalysts use the case history method in order to diagnose the individual as being of a certain type or as having certain typical traits, whereas the sociologist employs the case history method to detect the presence or absence or the degree of presence or absence of one or more environmental factors in the biographies of individuals of a known type. Just as the psychologist's diagnostic use of the case history depends for its validity and significance upon some conceptual scheme underlying his diagnosis, so the sociological use of the case history depends for its validity and significance upon the classification and definition of environmental factors.

Although the methods employed in criminological research can thus be clearly distinguished one from another, actual investigations do not necessarily employ one method to the exclusion of the others. A given piece of research may combine two or more methods. Thus, for example, Cyril Burt, primarily a psychologist, employs the test method, the psychological use of the case history method and the sociological use of the case history method. Similarly, Clifford Shaw, a sociologist, employs the psychological use of the case history method, the sociological use of the case history method, and the census method. We shall find that the best researches are those which have been accomplished by the employment of two or more methods in combination.

We have now stated the specific problems toward the solution of which research in causation has been directed, and we have also stated the methods employed in these researches. It is important at this point to show that the methods are capable of yielding data relevant to the problems. This can be done by stating a number of propositions which indicate this adaptation

of the methods to the problems. The following propositions are in a sense the postulates which criminologists have made, either explicitly or not. It will be seen at once that all research which has thus far been conducted has been based upon these postulates and that the questions which investigators have formulated for themselves are answerable by empirical evidence obtainable by one or another of the foregoing methods.

(1) Individuals can be differentiated in terms of one or more human or environmental factors, and they can be classified according to these differences. If a factor is measurable, individuals can be classified according to the degree to which the factor is present. If a factor is susceptible only to direct inspection, individuals can be classified only according as the factor is present or absent.

(2) Environmental situations can be differentiated in terms of one or more constituent elements, and they can be classified according to these elements. If an element is measurable, environmental situations can be classified according to the degree to which the element is present. If an element is susceptible only to direct inspection, environmental situations can be classified only according as the element is present or absent.

(3) A class of individuals can be determined by an enumeration of factors which can be treated as characteristic traits of that class of individuals.

(4) A class of environmental situations can be determined by an enumeration of factors which can be treated as elements in that class of environmental situations.

Existence Postulates.

(5) Individuals possessing diverse traits exist.

(6) Environmental situations constituted by diverse elements exist.

Since in the following sections we shall criticize as well as report criminological researches, it is advisable to state in advance

the specific criteria by which we shall evaluate their findings. We shall separate these criteria into two groups: (1) the conditions upon which the validity of the findings rests; (2) the conditions upon which the significance of the findings rests. We shall subordinately distinguish the conditions of statistical and of theoretical significance. These conditions express the minimum methodological requirements which investigators must satisfy in order to do valid and significant research.

The validity of data consists in their being accurate and reliable. By accuracy is meant the precision of the observation or measurement; by reliability, the uniformity of a number of observations by the same or by different observers. Both the accuracy and the reliability of observations depend upon the definition of the observable, that is, the class of items to be observed. The item cannot be either counted or measured unless it is unambiguously defined. When a measuring instrument is employed, the necessary definiteness should be assured by the precision and uniformity of the instrument; when individuals are classified and then counted as members of one or another of the defined classes, accuracy and uniformity in the assignment of individuals to classes depend upon the clarity of the definitions out of which the classification is constructed.

Research which employs a measuring instrument is, of course, subject to possible inaccuracy and variability in the instrument itself; but these defects are more easily overcome than the obstacles to accuracy and uniformity of observation present in research which is carried on by direct inspection. A test instrument can be tested for its accuracy and uniformity. It is much more difficult to ascertain the accuracy and reliability of human observers.⁵ It must, of course, be remembered that unless the nature of the test instrument is defined, although the data which it yields may be accurate and reliable, the significance of the data must be otherwise determined. When observation is by direct inspection without the aid of instruments, the definitions

⁵If one requires evidence for this point, he need only refer to Dorothy S. Thomas, *Some new techniques for studying social behavior*. New York: Bureau of Publications, Teachers College, Columbia University, 1929.

of the observables, indispensable to the accuracy and reliability of such observations, may or may not also render data significant, according as these definitions express concepts which are members of a set of compendent variables.

This first requirement can be summarized briefly as follows:

(1) The data of direct observation must be instances of defined classes of observable items. (2) An estimate of the accuracy and reliability of the human observer employed in direct observation of phenomena should accompany the use of the data derived from such observation. (3) The data derived from the use of test instruments should be accompanied by some measure of their accuracy and reliability. Unless these minimum requirements are satisfied, the validity of the data remains completely indeterminate. Invalid data should not be used as a basis for inference or interpretation; nor should data the validity of which is neither known nor capable of being estimated. Unless the data are valid in the two senses indicated, the use of numbers to represent either the results of counting or of measurement is a vicious practice, because it gives the data which are denumerated a specious definiteness and comparability which they are not known to possess. It is, furthermore, obvious that unless the data are expressible numerically, they are not susceptible to any statistical treatment.

Two stages in the interpretation of valid data must be separated. The first we have already discussed under the head of statistical inference. The second is the interpretation of the results of statistical inference. The data of observation or measurement have no generality; they always constitute knowledge about some particular sampling of the universe. Statistical inference is the process by which we pass from the knowledge of the particular sampling to knowledge of the universe represented by that sampling. The products of statistical inference may therefore be said to have a generality which the data of observation or measurement necessarily lack. Since our research problems are never formulated with respect to definite aggregates of individuals but always with respect to the classes of which any

definite aggregate of individuals is only a sampling, it is always necessary for the observer to be able to develop the data of observation by the application of statistical processes.

The requirement which research must satisfy at this point can be stated as follows. The data must not only be valid but they must be capable of yielding statistical inferences. This capacity depends upon a number of factors which can only be mentioned here, such as the fairness of the sampling, the size of the sampling, the homogeneity of the sampling with respect to other traits than the observed trait, the distribution of the observed trait, whether continuous, discrete, normal, bi-modal, multi-modal, etc.

It may be possible to apply a statistical process to data even when it is strictly *not correct* to make such application. Before any statistical procedure is employed with respect to a given set of data, therefore, it is always necessary to determine whether that statistical procedure is applicable to the particular data, and, furthermore, whether it is appropriate to the problem under investigation. When the character of the data is such that a given statistical technique is inapplicable, the result of the application of that technique to the data must be invalid.

Assuming that the raw data of criminological research are valid and that the products of statistical inference from such data are also valid, we can now pass to the second condition involved in the interpretation of the findings. This second condition can be understood only in the light of the specific problems by which these researches have been directed. The aim of criminological research is, as we have seen, to differentiate classes of individuals. In order that the data obtained by investigations may satisfy this aim, that is, be capable of being so interpreted that answers to the specific questions of differentiation can be given, control or comparison groups must always be employed.⁶

⁶To understand these researches it will be necessary to distinguish between control groups and comparison groups. A control group is a group that is equated in its distribution of certain variables to another group in order to study the differences that then result for certain other equated (uncontrolled) variables. It is not necessary that a control group contain the same number of cases as the original group,

It is insufficient, for instance, to complete an investigation in which a sampling of the criminal group is observed or measured for one or more factors, if we do not possess similar knowledge with respect to a comparable group of non-criminals. Similarly, research which aims to differentiate one type of criminal from another fails unless comparable samplings of the classes of individuals to be differentiated are studied. It is, therefore, clear that the data of research may be valid both observationally and statistically and yet be insignificant in the sense that they are incapable of yielding any conclusions relevant to the problem which has directed the research. The insignificance of the data and the inconclusiveness of the research are one and the same thing. The failure to employ properly constituted control groups or properly selected comparison groups is a failure to satisfy the basic condition upon which the significance of the findings of these criminological researches rests. The investigations which we shall examine in the subsequent section are criticized either for the failure to use any control or comparison groups or for various errors which attend the use of control and comparison groups.

It is to be noted that we have restricted our discussion of the conditions underlying the significant interpretation of the research findings to a consideration of their ability to yield conclusions relevant to the problems of differentiation. It is unnecessary to repeat here the further conditions which the re-

as long as the general lines of its distribution are identical. A control group is said to be defective when it fails to equate one or more relevant variables associated in the causation of the phenomenon, but not under statistical scrutiny. Comparison groups are greater or lesser portions of the population, generally represented by figures from the census, which are generally not equated for any variable and at most for one or two; they have merely a rough arbitrary value when used for mere percentage comparisons (their customary function) and are of no value at all for the more reliable forms of correlation, which demand control groups. It may be further remarked that such is the uniqueness of each individual investigator's analysis, preconceptions and methods that he generally has to create his control group along the same lines as his original group and is not able to utilize groups for which data have been unearthed by other investigators, since those data are probably not relevant to his own approach. Where control groups are, as it were, borrowed from other investigators, the method of research is not necessarily the census method, but to avoid confusion, depends upon the way the investigator handled his original group.

searches would have to satisfy in order that their findings shall render conclusions relevant to problems of etiology.⁷

Failure to observe any of the foregoing methodological requirements, based upon the nature of the problems and the methods of criminological research, must necessarily result in invalid data, and render insignificant and inconclusive the empirical evidence which is offered as relevant. Where research has failed to observe these requirements it is not entirely worthless, but worthless only in the sense that it has no scientific significance. It can be said here that none of the researches now to be examined sufficiently satisfies the minimum standards for valid and significant research.

We think that this will be apparent to anyone who undertakes an examination of the researches reported in the following section. While we have not summarized *all* the empirical studies in this field, the investigations which we do summarize are typical of the work and certainly include the best work which has been done. The following section, therefore, constitutes an adequate, if not an exhaustive, survey of investigations which, for the reason already given, are classified as studies of the causation of crime.

We present this summary for two reasons. First, as far as we know, researches in this field have nowhere been adequately summarized and analyzed. Second, in no other way can the inadequacy of criminological research be so clearly displayed. It is our thesis that criminological research has not yet achieved a single definite conclusion and that its utter lack of significance is due to defects either in the planning or the execution of the researches. We offer the following summary as the evidence upon which our judgment is based. The reader can examine the evidence for himself and make an independent estimate if he cares to do so. However, he should approach the summary with the understanding that it is like a series of complicated diagrams and charts which accompany a text for illustrative purposes, the significance of which cannot be seen at a glance but only after careful study. The reader who does not care to make that effort may proceed

⁷See Chapter IV, *supra*.

immediately to the third section of this chapter in which we endeavor to summarize the major defects in methodology which have prevented these studies from achieving either valid or significant results.

Section 2. A Survey of Empirical Studies of the Causes of Crime.

We shall present these researches in five groups, each consisting of investigations carried on in one of the methodologically distinctive manners described above.⁸

- I. Researches by the test method.
- II. Researches by the psychological use of the case history method.
- III. Researches by the sociological use of the case history method.
- IV. Researches by the census method.
- V. Researches by two or more methods.

Where the number of researches is sufficient to render it feasible, each group will then be further subdivided in terms of more or less general problems to which the method has been applied. We shall, for example, in our discussion of researches by the test method distinguish investigations of the relation of intelligence and mental defect to criminality, investigations of the relation of physical traits to criminality, investigations of the relation of traits of character and temperament to criminality, and investigations of the relation of grades of intelligence to types of criminality. In this way we shall in some cases be able to consider together all investigations of the same general problem by the same method. However, it is important to bear in mind that the same problem may have been investigated by different methods and to note the cross references that occur in each case.

⁸The combinatory use of methods is perhaps more prevalent than our list of researches might seem at first glance to indicate. However, where there is only a slight use of alternative methods in a reported research, that research has generally been listed under its dominant method. At any rate, the conclusions reported belong inescapably in the methodological section to which they have been assigned.

I. RESEARCHES CONDUCTED BY THE TEST METHOD.

These investigations can be subdivided into four groups:

- (1) The relationship between physical traits and criminality.
- (2) The relationship between kinds and degrees of intelligence and criminality.
- (3) The relationship between traits of character and temperament and criminality.
- (4) The relationship between grades of intelligence and different types of criminality.

(1) *The relationship between physical traits and criminality.*

(a) Because of its historical significance, mention must be made of the work of Lombroso.⁹ As is well known, Lombroso thought that by measurement and inspection he had discovered a positive relationship between a number of physical traits and criminality. The rôle of measurement or precise anthropometry was, particularly in his later writings,¹⁰ made subsidiary to that of observation, or the anatomico-pathological method, which involved the detection of certain physical anomalies, such as asymmetrical cranium, long lower jaw and outstanding ears, as stigmata of degeneracy. The physical traits which he employed as indices of criminality were not, however, causes of criminality. The cause was an inborn degenerate constitution and the various stigmata were the correlates of hereditary moral imbecility.¹¹ Lombroso worked largely with criminals, however, and failed to make any adequate comparisons with non-criminals. Consequently his reports of the high incidence of certain physical defects among

⁹*L'uomo delinquente*. 6th ed., Torino: Fratelli Bocca, 1896.

¹⁰See particularly C. Lombroso and E. G. Ferrero, *La donna delinquente*. 2nd ed., Torino: L. Roux e C., 1894.

¹¹It should be noted that while Lombroso held that degeneracy and atavism were important factors in criminality, he did not claim that they were the only determining factors. In his later work, particularly, he held that degeneracy varied in degree, and that certain types of criminals were influenced by heredity to a relatively slight extent and by social, economic and other factors to a much greater extent.

criminals are inconclusive both for that reason and because of the unreliability of his non-metrical observations.¹²

(b) Galet¹³ compared the ears of 200 criminals and non-criminals. The criminals showed a slightly higher proportion of degenerative defects than the non-criminal group.

(c) Vervaeck¹⁴ compared the height of a group of over 200 Belgian prisoners with similar measurements for the Belgian army. The prisoners tended to be somewhat taller than the soldiers. 32% of the prisoners but only 23% of the soldiers were rated as very tall.

A number of investigators¹⁵ have attempted to correlate endocrine disturbances with criminality.

(d) After the examination of 20,000 convicts, M. G. Schlapp¹⁶ suspected that over one-third of them suffered from glandular imbalance.

(e) W. Timme¹⁷ examined 25 'lifers' in a New York prison, and found that 24 were glandular 'types.'

(f) R. A. Reynolds¹⁸ reported that all the murderers in San Quentin at the date of his investigation had abnormal thyroids.

(g) After the clinical and psychometric examination of some 500 delinquents, L. Grimberg¹⁹ attributed their delinquency to emotional defect caused by an organic inferiority expressed in hereditary endocrine imbalance.

¹²The findings of later investigators, particularly Goring, (see p. 150 ff, *infra*) that the incidence of these defects is no higher in non-criminal than in criminal populations, has been regarded as proof of the invalidity of Lombroso's position. The position, too, is incompatible with current findings in psychology and genetics.

¹³Reported in *La lutte moderne contre le crime* Bruxelles: F. Larcier, 1930, p. 77.

¹⁴*Ibid.*, p. 67.

¹⁵W. Engelbach, *Criminology as related to endocrinology* Ill Med. J., 1926, 50, 24-30; S. J. Morris, *Relation of persistent thymus gland to criminology*. Med. Rec., 1921, 99, 438-439. See also T. Sellin, *A new phase of criminal anthropology in Italy*. Annals Am Acad. Pol and Soc Science, 1926, 125, 233-242.

¹⁶Behavior and gland disease. J. Hered., 1924, 15, 3-17. See also M. G. Schlapp and E. H. Smith, *The new criminology*. New York. Boni and Liveright, 1928.

¹⁷Quoted in New York World, May 10, 1924.

¹⁸Quoted in Associated Press dispatch, February 9, 1930.

¹⁹Emotion and delinquency. New York: Brentano's, 1928, pp. 146-147.

In a study of 250 adult criminals L. Berman²⁰ found from two to three times as much endocrine disturbance as in a group of 280 non-criminals of the same age. He attained substantially the same results when he compared 196 juvenile delinquents with a control of 298 well and healthy adolescents. The pituitary deficientes constituted 35% of the juvenile delinquent group and consisted of the perennial thieves, precocious hoboos and habitual liars; the parathyroid deficientes constituted 30% and consisted of those brought (*sic*) for impulsive assault and inability to learn normal social inhibitions; the thymus-adrenal dysfunctionals constituted 15% and consisted of the perverts and exhibitionists; and the thyroid-disturbed constituted 20% and consisted of the emotional hysterics with uncontrollable tempers. The author also lists the types of endocrine imbalance found coexistent with nine separate types of crime.

The value of such work is negligible because of the unreliability of endocrinological diagnosis, and the absence of control groups in terms of which glandular normality must be standardized.

(2) *The relationship between kinds and degrees of intelligence and criminality.*

(a) In 1921 H. H. Goddard²¹ examined 236 cases from an Ohio juvenile court and found 33% feeble-minded. He had earlier estimated that from 25% to 50% of the inmates of penitentiaries and reformatories are feeble-minded.²²

(b) M. R. Fernald²³ tested 100 inmates of the Bedford Hills Reformatory for Women and found 48% feeble-minded.²⁴

²⁰Crime and the endocrine glands Manuscript, 1931.

²¹Juvenile delinquency New York: Dodd, Mead and Co, 1921, pp 53-54

²²Feeble-mindedness its cause and consequences New York. The Macmillan Co., 1914, p. 7, and Bull Am Acad. Med, 1914, 15, 105-112

²³Practical applications of psychology to the problems of a clearing house. J. Crim. Law and Criminol, 1917, 7, 722-731.

²⁴This was on the Stanford Revision of the Simon-Binet test. An interesting illustration of the discrepant figures for feeble-mindedness that can be obtained by using various standards is given on page 727, where percentages ranging from 34% to 100% are cited.

(c) H. M. Adler²⁵ reports that of a group of 577 delinquents tested at the St. Charles State Training School, 31% were found to be feeble-minded.

(d) J. De Las Heras²⁶ gave an intelligence test to the inmates of the reformatory school at Henares, Spain, and found 20% sub-normal.

(e) M. G. Caldwell²⁷ reports, in a study of 492 delinquent boys committed to the Wisconsin Industrial School, that approximately 65% had an I. Q. below 85²⁸ as rated on the Terman I. Q. interval, compared with 11% for Terman's non-delinquent group of 905 children. Various comparisons were also made between the intelligence of the delinquent group and that of groups of non-delinquent children of families requiring charitable aid (totalling 1,352 children) and 252 girl delinquents, as determined by other investigators.

(f) E. A. Lincoln²⁹ found only insignificant differences in the distribution of intelligence of 3,368 military prisoners at Fort Leavenworth and that of the million and one-half population examined by the army psychologists.

(g) E. A. Doll³⁰ compared the distribution of intelligence of 839 inmates of the New Jersey State Prison with that of the army white draft. He concluded that when allowance was made for selective influences on the basis of nationality and color (the prison group being half negro and foreign-born) the mental constitution of the prison group as a whole corresponded very closely to the average intelligence of adult males of the State as a whole. His allowance for the influence of nationality and color was based

²⁵Tenth annual report of the criminologist. (July 1, 1926 - June 30, 1927.) Department of Public Welfare, Ill.

²⁶*La juventud delincuente en España y s*
Henares: Imp. de la Escuela Ind. de Jóvenes
Criminol., 1928, 19, 287)

²⁷The intelligence of delinquent boys committed to Wisconsin Industrial School. J. Crim. Law and Criminol., 1929, 20, 421-428

²⁸Lack of facilities did not permit the examination of 17 1% of the cases.

²⁹The intelligence of military offenders J. Delinq., 1920, 5, 31-40.

³⁰The comparative intelligence of prisoners J. Crim. Law and Criminol., 1920, 11, 191-197.

on estimates of undetermined validity rather than on precise statistical determinations.

(h) C. P. Stone³¹ made a comparative study of 399 inmates of the Indiana Reformatory and 653 men of the United States Army; he found the average mental age of the army group to be 13.4 and that of the Reformatory group to be 12.65.

(i) Similarly, H. M. Adler and M. B. Worthington³² found 27.7% of 5,404 Illinois cases mentally deficient as compared with 25% of an army draft group of 93,793. This study also reported wide divergencies in the extent of mental deficiency as between institution and institution and among various sections of the State of Illinois.

(j) C. Murchison³³ made an elaborate statistical comparison of the intelligence of 3,942 prison inmates with that of 44,223 selected cases from the draft army. He found the native white criminal group to be superior to the white draft group in alpha scores.

(k) G. J. Mohr and R. H. Gundlach³⁴ working with approximately 550 prisoners at Joliet also found that the average intelligence of the prisoners was slightly superior to that of the Illinois white draft as determined by the alpha test. They also found that the prisoners had higher average height, weight and chest circumference than the army group.

Certain general criticisms can be made of all of this work. Even where controls have been used, their comparability is questionable, and the technique of the comparison statistically crude. The prerequisites for a proper control group are extremely difficult to meet, and unless they are satisfied the comparison is unreliable. Second, the validity of various intelligence tests as measuring instruments is not beyond question. More crucial, however,

tory and 653 me
238-257.

³¹The scope of the problem of delinquency and crime as related to mental deficiency. *J. Psycho-Asth.*, 1925, 30, 47-56.

³²Criminal intelligence. Worcester, Mass. Clark University, 1926, pp 41-44.

³⁴A further study of the relation between physique and performance in criminals. *J. Abn. and Soc. Psychol.*, 1929, 24, 91-103.

than either of these factors are the problems raised in connection with the interpretation of test scores and the establishing of distinctions between normal intelligence and the various degrees of subnormal intelligence.

E. H. Sutherland's⁸⁵ examination of some 350 studies of the intelligence of American delinquent groups gives some indication of the variations in result that can be achieved where different investigators adopt different standards of normality. The following table taken from this valuable survey gives a rough indication of the trend of diagnosis of feeble-mindedness among delinquents and criminals since 1910.

PSYCHOMETRIC STUDIES OF DELINQUENTS BY PERIODS 1910-28;
ALL INSTITUTIONS

Years	Number of Studies	Percentage Feeble-minded in Median Study	Percentages Feeble-minded Range
1910-14.....	50	51	4-96
1915-19.....	142	28	1-82
1920-24.....	104	21	1-69
1925-28.....	46	20	2-58

The fact that intelligence tests have been standardized for large samplings of the population, has led to attempts to interpret scores obtained by intelligence tests in terms of these standards, although a few of the studies have employed control groups. Thus, it has been suggested that the scores made by delinquents on the Binet-Simon test can be compared with Terman's norms for unselected school children on the same test. When this was done, there was found an appreciably higher degree of feeble-mindedness among the delinquent children than among the group of school children. However, the validity of this comparison is questionable since the school group would probably give a totally different distribution with respect to those economic and social characteristics which are known to be related to the intelligence

⁸⁵Mental deficiency and crime, chapter 15 of Social attitudes, ed. by Kimball Young. New York: Henry Holt and Co, 1931.

distribution. Significant comparisons can only be made of groups carefully equated for all relevant variables.⁸⁶

It has also been suggested that the distribution of intelligence in the draft army furnishes a standard of comparison, on the ground that the draft army is a fair sample of the general population. In view of the fact that 24% of the draft army have been estimated to be feeble-minded,⁸⁷ studies which find 20% of the criminal group to be feeble-minded cannot be said to be indicative of a high correlation between mental defect and criminal behavior.

Such attempts to interpret comparatively the scores obtained by intelligence tests administered to criminals have also been criticized in terms of the statistical assumptions which underly the norms for intelligence. It has generally been assumed that in the population at large the average I. Q. is 100 and the average mental age, 16. A number of investigators⁸⁸ have maintained that these estimates are excessively high, and that the true figures are probably much lower. If this is the case the low intelligence often reported as having been discovered among criminals may be partly due to the high standards employed by the testers. In view of this criticism a number of investigators have employed lower standards, thereby obtaining different results from the same test. If, in addition, it is remembered that careful investigators today base their diagnoses of feeble-mindedness not only on verbal test scores but also on the result of a variety of other tests and on qualitative criteria,⁸⁹ it will readily be seen that no statistically reliable conclusions can be drawn from the incomparable

⁸⁶See pp 103-104, *supra*

⁸⁷R. M. Yerkes, *Psychological e* _____
of the National Academy of Science, Vol XV Washington. Government Printing Office, 1926.

⁸⁸See E. A. Doll, *The average mental age of adults* 3, 317-328; C. Burt, *Delinquency and mental defect*. Br. J. Crim. Psychol., 1931, 3, 168-178; P. M. Symonds, *A second approximation to the curve of distribution of intelligence of the population of the United States*. J. Educ. Psychol., 1923, 14, 65-81. See also Terman's statement quoted in M. R. Fernald, M. H. S. Hayes and A. Dawley, *A study of women delinquents in New York State*. New York: The Century Co., 1920, pp 418-419.

⁸⁹No criticism of the practice of employing qualitative criteria is intended from the point of view of effectiveness of diagnosis. It probably increases the validity of the diagnosis, but it also probably tends to decrease its reliability.

and ambiguous indices of feeble-mindedness among delinquents and criminals which are yielded by studies such as those to which we have referred.

Studies have also been made of the relation between mechanical as opposed to verbal intelligence and delinquency.

(l) M. R. Jessup,⁴⁰ working with 138 boys from the Los Angeles Juvenile Court, found an excess of mechanical aptitude over verbal intelligence, these boys exceeding the Stenquist norms for New York school children in mechanical ability.

(m) F. D. Daugherty,⁴¹ working with 114 boys and 108 girls from the same Court, likewise found an excess of mechanical ability over the established norms for unselected groups.

(n) M. E. Aden⁴² gave the Stanford-Binet to 410 delinquents and found their mean I. Q. to be 71.1. When the mental ages of his group were paired for the corresponding chronological ages on the Pintner-Paterson norms, the group ranked higher in performance. On the assumption that the Pintner-Paterson group were of normal verbal intelligence, this would seem to indicate a difference in the intelligence of delinquents when graded by verbal and by performance tests.

Two criticisms are to be made of these studies: first, that no direct comparison is made between the scores on the Stenquist mechanical ability test and those on the standard intelligence tests;⁴³ and second, that the results of the Stenquist test given to California delinquents are not strictly comparable with the Stenquist norms, since these norms were established by giving the

⁴⁰Preliminary report of a study of the mechanical ability of delinquent boys of the Los Angeles Juvenile Court, 1924. *J. Delinq.*, 1925, 9, 105-116.

⁴¹A study of the mechanical ability of delinquent children of the Los Angeles Juvenile Court, 1925. *J. Delinq.*, 1926, 10, 293-311.

⁴²Preliminary report of a study of the motor ability of delinquent boys and girls of the Los Angeles Juvenile Court. *J. Delinq.*, 1926, 10, 351-367. For further material of this type, see J. L. Stenquist, E. L. Thorndike and M. R. Trabue, The intellectual status of children who are public charges. *Arch. Psychol.*, 1915, No. 33.

⁴³For appropriate technique for measuring variations in ability see T. L. Kelley, Influence of nurture upon native differences. New York: The Macmillan Co., 1926, and C. Brigham, General report on the scholastic aptitude test (28th Annual Report of the Secretary of the College Entrance Examination Board, Appendix D.) New York: Published by the Board, 1928.

test to New York school children. It is also likely that the norms used for the other tests are not entirely applicable to the delinquent groups.

(3) *Relationship between traits of character and temperament and criminality.*

Various test instruments have been constructed for measuring non-intellectual traits. A number of standard tests which purport to measure various personality traits have been employed in the study of delinquency, and individual investigators have constructed their own batteries of tests for various character traits.⁴⁴

(a) E. K. Bryant⁴⁵ tested 100 boys of the Whittier State School of California by the Downey test and got a relatively high score in "assurance" and a relatively low score in "resistance".

(b) E. Wires⁴⁶ obtained similar results with a group of 67 delinquents in Detroit.

(c) Later Bryant⁴⁷ made a comparative study of delinquents and non-delinquents by the Downey test and found that the delinquents were inferior in speed of decision, coordination of impulses and somewhat in motor inhibition.

The significance of these three studies is difficult to estimate because of the doubtful validity of the test. Control groups were absent in the first two studies; and the control group that was employed in the third was both too small and not strictly comparable, having been selected from the Berkeley High School.

(d) C. L. Weber and J. P. Guilford⁴⁸ gave tests to 86 prisoners in the men's reformatory at Lincoln, Nebraska, who had an aver-

⁴⁴C. Landis has made a careful study of the validity of ten such measures including the Pressey X-O test, and has found them to be unsatisfactory as measures of emotionality in delinquents. (An attempt to measure emotional traits in juvenile delinquency. Manuscript, 1931.)

⁴⁵The "will-profile" of delinquent boys. *J. Delinq.*, 1921, 6, 294-309.

⁴⁶The Downey will-temperament profile in personality studies of juvenile delinquents. *J. Abn. and Soc. Psychol.*, 1926, 20, 416-440.

⁴⁷Delinquents and non-delinquents on the will-temperament test. *J. Delinq.*, 1923, 8, 46-63.

⁴⁸Character trends versus mental deficiency in the problem of delinquency. *J. Crim. Law and Criminol.*, 1926, 16, 610-612. See also J. P. Guilford, An attempted study of emotional tendencies in criminals. *J. Abn. and Soc. Psychol.*, 1926, 21, 240-244.

age intelligence higher than the army standard, and obtained somewhat lower scores on the Pressey X-O test for affectivity and somewhat higher scores for idiosyncrasy than the scores given in Pressey's norms. The latter comparison is of little significance, as the Pressey norms were obtained from a very small group of college students⁴⁹ and the test itself is of dubious validity. In this particular investigation only 47 of the replies could be used.

(e) V. M. Cady⁵⁰ constructed a battery of tests to measure moral traits, and gave them to 70 Whittier School boys, an incorrigible public school group and a corrigible public school group, all of the same age. In general, his finding was that the incorrigible group gave higher indices of deficiency in the character traits studied than the good conduct group, and that the delinquent group exceeded both public school groups in these indices.⁵¹

(4) Relationship between degrees and kinds of intelligence and various types of criminality.

(a) V. V. Anderson⁵² found that the feeble-minded constitute a large proportion of recidivists, that 25% to 40% of recidivists are feeble-minded, but he did not give comparable percentages for non-recidivists.

(b) On the other hand, C. Murchison⁵³ is of the opinion that

⁴⁹See S. L. Pressey, A group scale for investigating the emotions. *J. Abn. and Soc. Psychol.*, 1921, 16, 55-64.

⁵⁰The estimation of juvenile incorrigibility. *J. Delinq Monogr.*, 1923, No. 2.

⁵¹H. R. Laslett (Preliminary notes on a test of delinquent tendencies. *J. Delinq.*, 1925, 9, 222-230), A. S. Raubenheimer (An experimental study of some behavior traits of the potentially delinquent boy. *Psychol Monogr.*, 1925, 34, No. 6), and H. M. Cushing and G. M. Ruch (An investigation of character traits in delinquent girls. *J. Appl. Psychol.*, 1927, 11, 1-7) have also differentiated delinquent and non-delinquent groups to some extent by means of ingenious character tests. Although these character tests frequently possess fairly high reliability, it is impossible to say precisely what traits they measure. For that reason, they cannot as yet give any real insight into the causes of delinquency. However, as L. M. Terman (Research on the diagnosis of pre-delinquent tendencies. *J. Delinq.*, 1925, 9, 124-130) points out, they may possibly be found to be of some predictive value in selecting pre-delinquents from school populations for the purpose of special training. Their value as a preventive instrument of this type remains undetermined.

⁵²Feeble-mindedness as seen in court. *Ment. Hygiene*, 1917, 1, 260-265.

⁵³Criminal intelligence. Worcester, Mass.: Clark University, 1926, pp. 70-71.

recidivists are on the average more intelligent than first offenders.⁵⁴

(c) F. C. Shrubsall⁵⁵ found that 51.6% of a group of defective boys and 74.3% of a group of non-defective boys had stolen; and that 19.4% of a group of defective girls and 34.4% of a group of non-defective girls had stolen.⁵⁶

(d) A survey of 1,288 inmates of county jails and penitentiaries in New York in 1922 showed that of those arrested once, 5.8% were mentally deficient; of those arrested twice, 9.9%; of those arrested three times, 9.6%; of those arrested four or more times, 6.7%.⁵⁷ These percentages do not indicate any relationship between mental deficiency and recidivism. The variable efficiency with which mentally deficient cases are committed to special institutions may have had a great influence in determining these percentages.

(e) E. M. Riddle⁵⁸ studied 435 children, of whom 190 were known to steal, 68 were known not to steal and 177 had no previous record of stealing. 34% of the children known not to steal, 47% of the children known to steal (a much larger group) and 58% of the group in which the presence of stealing was undetermined, had I. Q.'s under 70.

(f) E. H. Sutherland⁵⁹ analyzed the reports of Auburn State Prison, New York, from 1921 to 1926, and found that 52% of all

⁵⁴A defect in comparisons between recidivists and first offenders is that many of the first offenders may later become recidivists (The percentage of recidivism has been estimated to be as high as 75%) It is clear that the presence of any considerable number of such cases in the group of first offenders might easily mask any relationship that exists.

⁵⁵Delinquency and mental defect. *Brit. J. Med. Psychol.*, 1923, 3, 179-187.

⁵⁶J. E. W. Wallin (Delinquency and feeble-mindedness. *Ment. Hygiene*, 1917, 1, 585-594, and The diagnostic findings from seven years of examining in the same school clinic. *J. Delinq.*, 1923, 8, 169-195) and C. Burt (Delinquency and mental defect. *Brit. J. Med. Psychol.*, 1923, 3, 168-178) report that the group with the highest delinquency rate is not the definitely deficient group but the backward group.

⁵⁷Report of a mental hygiene survey of New York county jails and penitentiaries, with recommendations. New York: National Committee for Mental Hygiene, 1924, p. 14.

⁵⁸Stealing as a form of aggressive behavior. *J. Abn. and Soc. Psychol.*, 1927, 22, 40-51.

⁵⁹Mental deficiency and crime.

those who entered the institution in this period were diagnosed as feeble-minded, and that 51% of those who were punished for institutional delinquencies in the same period were so diagnosed.

A number of investigators⁶⁰ have reported differences in average intelligence or differences in the proportion of feeble-mindedness among various classes of offenders. While, according to most of their reports, individuals convicted of embezzlement or fraud tend to exhibit a higher intelligence than other criminal groups, no consistent differences have been found in the comparative intelligence of other classes of offenders.⁶¹

A difficulty common to all the researches employing the test method has been their failure to take account of the possible heterogeneity of the factors which are measured by the various tests. In the case of intelligence, for example, C. Brigham⁶² has pointed out the invalidity of group comparisons which ignore the diversity of independent traits measured by the intelligence tests. The concept of intelligence seems to include a number of separate traits such as verbal ability, numerical ability and memory. The intelligence tests may fail to differentiate delinquent from non-delinquent groups either because delinquents and non-delinquents do not in fact differ with respect to those traits or because the differences are not revealed by the intelligence quotient. Individuals with the same intelligence quotient may differ significantly with respect to one or more of the traits into which the concept of intelligence can be analyzed. This may also be true of the other tests that are used to measure traits of temperament, character and mechanical aptitude. Thus, even if the researches which we have considered were otherwise unimpeachable, it would

⁶⁰See Murchison, Erikson, Root, (*infra*, pp 116, 146). See also Report of a mental hygiene survey of New York county jails and penitentiaries, p 12

⁶¹There have been a number of other test studies, particularly of the relation between intelligence and criminality. These remaining studies conducted by Slawson, Calhoun, Burt and others are the most careful work done in this field. But in each case the test method has been used in conjunction with some other method or methods of research and we shall therefore reserve these studies for further discussion in their proper context below. See pp 145, 155, 157.

⁶²Intelligence tests of immigrant groups. *Psychol. Rev.* 1930, 37, 158-165. See also T. L. Kelley, *Crossroads in the mind of man*. Stanford University, California: Stanford University Press, 1928, C. Spearman, *The abilities of man*. New York: The Macmillan Co., 1927.

be impossible to interpret their results with any degree of precision.

II. RESEARCHES CONDUCTED BY THE PSYCHOLOGICAL USE OF THE CASE HISTORY METHOD.

Work of this type has consisted largely of two types of investigation: (1) the examination of biographies of offenders in order to gain insight into their motivating psychological mechanisms and (2) the study of the frequency of personality types in criminal or delinquent populations and, less often, in non-criminal or non-delinquent populations. Although work of the first type, the qualitative study of case histories, has produced a great deal of suggestive material, it has been confronted by two major difficulties. In the first place, the items selected as relevant in a given biography are influenced to a considerable extent by the previous training of the investigator. Furthermore, the relationships among factors that appear significant to one investigator are considered insignificant by another. Difficulties such as these are typical of all observational work. They are especially prevalent in the observation of such subtle and little understood factors as feelings, attitudes and emotions; and they can be obviated only by the adoption of a precisely defined and logically consistent terminology. The intensive study of a great many cases has provided concepts which might well be employed to direct more careful empirical research in the future.⁶⁸

⁶⁸The most comprehensive set of concepts is that of psychoanalysis. (See F. Alexander, *Mental hygiene and criminology* Ment. Hygiene, 1930, 14, 853-882; F. Alexander and H. Staub, *The criminal and his judge*. Vienna. Internat. Psychoan. Verlag, 1929) Psychoanalytic concepts, in addition to their use by psychoanalysts, have exerted considerable influence upon many other investigators of the relationship between abnormality and crime. See W. Healy, A. F. Bronner, *Reconstructing behavior in youth* New York Alfred A. Knopf, 1929; B. Glueck, *Studies in forensic psychiatry* Boston Little, Brown, and Co., 1916

One should also note the work of B. Karpman who has probably performed the most extensive empirical investigation by psychoanalytic methods made in America. (Criminality, the super-ego and the sense of guilt. *Psychoanal. Rev.*, 1930, 17, 280-296; The psychopathology of exhibitionism *Psychoanal. Rev.*, 1926, 13, 64-97; The problem of psychopathies *Psychiat. Quar.*, 1929, 3, 495-525; Psychoses in criminals *J. Nerv. and Ment. Diseases*, 1926, 64, 331-351, 482-502; *Ibid.*, 1928, 67, 224-247, 355-374, 478-488, 599-608; *Ibid.*, 1928, 68, 39-54; *Ibid.*, 1929, 70, 520-534, 622-641) He has examined many thousands of prisoners, classified as criminally insane at Saint Elizabeth's Hospital, Washington, and has collected a number of

A number of studies of the second kind, the incidence of various psychological types in the criminal population, have appeared. It will be sufficient to notice a few of the more interesting of them.

(a) M. S. Covert⁶⁴ examined 100 unselected juvenile delinquents at the Whittier School and compared them with surveys of public school children in Boise, Santa Anna and Bakersfield. 37% of the delinquents, 7% of the Boise group, 21.5% of the Santa Anna group, and 7.2% of the Bakersfield group, were rated as excitable. The median intelligence quotient for the excitable children appeared to be about the same as that for the non-excitable children. Inasmuch as excitability was defined as "an emotional state characterized by loss or weakening of inhibitory control such that some form of irregular conduct results", the factor of delinquent behavior might well have influenced the excitability ratings.

(b) V. V. Anderson⁶⁵ reports that of some 4,000 delinquents studied in one state, 50% were suffering from some abnormal nervous or mental condition, and that this finding is in accord with the results of studies in other states. In another of his numerous studies,⁶⁶ he found that 31.2% of a group of 157 juvenile delinquents were psychopathic, as compared with 2.7% of some 4,000 school children in Cincinnati who were psychopathic or pre-psychopathic. Sutherland⁶⁷ has pointed out that these proportions are probably not typical because of the small number and selected character of the delinquent group and because the school children and the delinquents were not examined by the same method.

elaborate case histories without, however, making any statistical use of his data. His opinions can be briefly summarized (1) all criminals are abnormal; (2) the abnormality of criminals is mainly of two sorts, either neurotic or psychopathic; (3) the neurotic type is roughly identical with the casual offender and the psychopathic type with the habitual criminal

⁶⁴Excitability in delinquent boys. *J. Delinq.*, 1920, 5, 224-239.

⁶⁵Medical and psychopathic approach to the delinquent problem. *J. Crim. Law and Criminol.*, 1921, 12, 404-408.

⁶⁶Report of the mental hygiene survey of Cincinnati. New York: National Committee for Mental Hygiene, 1922.

⁶⁷*Criminology*. Phila.: J. B. Lippincott, 1924, p. 123.

(c) A. L. Jacoby⁶⁸ examined 1,184 individuals referred to the psychopathic clinic of the Recorder's Court, Detroit, and found 263 mentally subnormal, 121 insane, 504 abnormal but not insane, and 204 normal. The invalidating feature in this, as in a number of similar studies of his,⁶⁹ is that his data are derived from groups not homogeneous with the general criminal population. Court cases are usually not referred to clinics unless they are suspected of abnormality.

(d) F. H. Allen⁷⁰ concluded from an analysis of the case histories of 60 children caught stealing that in almost 50% of the cases their antisocial activity was an attempt to compensate for a sense of inferiority.

(e) R. H. Bryant⁷¹ reports 7 studies, covering 7,265 criminals. In this group 31% of the cases were classified as psychopathic personalities.

(f) The National Committee for Mental Hygiene⁷² reports mental abnormality in 59% of 608 Sing Sing cases; in 70.6% of 3,451 Texas penitentiary cases, and in 85.8% of 226 Texas county jail cases; in 58% of 502 New York police department cases and in 69% of 781 New York Juvenile Court cases; and in 46% of 1,000 Boston Municipal Court cases.

A number of studies have also been made of the relation between a type of abnormality and criminal behavior, or the relation between abnormality and a type of criminal behavior.⁷³

(g) Among the most interesting of these is the study of B. Glueck.⁷⁴ He found that of 608 consecutive entrants to Sing

⁶⁸The psychopathic clinic in a criminal court. *J. Am. Judicature Soc.*, 1923, 7, 21-25.

⁶⁹Disciplinary problems of the Navy. *Ment. Hygiene*, 1919, 3, 603-608. For similar reports of the distribution of types of abnormality among delinquents and criminals suspected of abnormality see H. M. Adler, *Sixth to Twelfth Annual Reports of the Criminologist*. Department of Public Welfare, State of Illinois, 1924-1930.

⁷⁰Psychic factors in juvenile delinquency. *Ment. Hygiene*, 1927, 11, 764-774.

⁷¹The constitutional psychopathic inferior, a menace to society and a suggestion for the disposition of such individuals. *Am. J. Psychiat.*, 1927, 6, 671-689.

⁷²Mental hygiene and delinquency. *Ment. Hygiene Bull.*, 1925, 3, 1.

⁷³W. C. Sullivan, *Crime and insanity*. New York: Physicians and Surgeons Book Co., 1925.

⁷⁴A study of 608 admissions to Sing Sing Prison. *Ment. Hygiene*, 1918, 2, 85-151.

Sing 66.8% were recidivists, while of the 91 native born psychopathic cases included in this group 86.8% were recidivists.

(h) In a similar study L. Rabinowicz⁷⁵ found that while 53.3% of 1,000 unselected cases in the prison at Forest, Belgium, were abnormal, 67.4% of the 488 recidivists included in the Forest group were abnormal. He also found that 83% of 100 cases in the Central Prison at Louvain, whose offenses were more serious than those of the Forest groups, and 87% of a group of 59 recidivists included in the Louvain group, were abnormal. The significance of these figures is lessened by several factors. First, comparison of the recidivist groups with the larger groups of which they form a part is obviously an inept way of displaying comparisons between the recidivist and non-recidivist groups. Second, the abnormal group included a large percentage of cases diagnosed as constitutionally immoral, a classification probably influenced by the incidence of criminality among, and the gravity and frequency of the offenses committed by, the persons diagnosed. Third, since the percentage of non-recidivists who will later become recidivists is unknown, first offenders cannot be considered as an adequate control for recidivists.

The significance of studies of abnormality in criminals is primarily conditioned upon similar studies of control groups and the reliability of the classifications employed. These classifications are most frequently in terms of abnormality. Abnormality itself is a rather loose term which may be taken to include the organic and functional psychoses, the neuroses and constitutional psychopathy. Constitutional psychopathy is an ill-defined and very little understood concept and has low reliability as a diagnostic criterion. That the reliability of most of the other psychiatric categories is also low, is suggested by the work of E. B. Wilson and J. Deming,⁷⁶ who found that when 973 cases were classified in one hospital and then reclassified, there was

⁷⁵La lutte moderne contre le crime. Bruxelles F. Larcier, 1930, pp 153, 154, 214.

⁷⁶Statistical comparison of psychiatric diagnosis in some Massachusetts State Hospitals during 1925 and 1926 Quar Bull. Mass. Dept. Ment. Dis, 1927, 11,

only 73% agreement in the diagnosis of dementia praecox. This figure is surprisingly low inasmuch as dementia praecox is considered a relatively clearly defined psychosis and the two classifications had some influence on each other. A further crucial difficulty has arisen from the fact that most of the abnormality classifications are partially defined in terms of the incidence of criminal behavior. This is particularly true of the category of psychopathic personality or constitutional psychopathic inferiority since criminalism is one of the symptoms that define this class. Wherever this is the case, it is obvious that results indicating a large percentage of abnormality among criminals, or certain classes of criminals, or showing a larger percentage of abnormality in delinquent than in non-delinquent groups cannot be regarded as exhibiting any other than a spurious relationship, no matter how excellent the evidence may be otherwise. The diagnostic classification must necessarily be made independent of the factor of criminality.

The researches set forth in this section indicate how disproportionate has been the amount of speculation and opinion in this field as compared with the valid and significant findings. There remain numerous problems which have never been investigated; and those which have been studied remain unsolved. Even were it assumed that research, such as that which we have surveyed, has resulted in valid indices of the nature and extent of mental and emotional abnormalities in the criminal population, it would still be difficult to interpret them significantly in the absence of knowledge of the nature and prevalence of identical abnormalities in the general population.

III. RESEARCHES CONDUCTED BY THE SOCIOLOGICAL USE OF THE CASE HISTORY METHOD.

Research of this kind, as conducted both by psychologists and sociologists, has for the most part consisted of examinations of the biographies of delinquents or criminals for the purpose of obtaining information about various environmental factors which may have influenced their behavior. The largest class of re-

searches employing the sociological use of the case history method deals with the environmental factors involved in the domestic situation. One would expect this to be so in view of the great emphasis that psychology has placed in recent years upon the home as the developmental background of adolescent and adult behavior. A number of studies have confined themselves largely to factors in the home situation.

(a) Having examined the case histories of 300 delinquents in the Los Angeles city schools, R. B. Fowler⁷⁷ reports broken and unsettled homes, lack of parental control, poverty, and wealth (*sic*) as the "major causes" of their delinquency. She points out that poverty may have various consequences, each of which may have an independent causal connection with the occurrence of crime,—shiftlessness of parents, the fact that both parents must work and therefore neglect their children, or that the children may be forced to do hard work too early.

(b) S. Dahlstrom⁷⁸ estimated the number of delinquents coming from broken homes at 50%. Either one or both parents of more than 50% of the delinquent children were alcoholic.

(c) W. F. Lorenz⁷⁹ studied some 300 ex-service men in penal institutions. 59% came from broken homes in their childhood.

(d) K. M. B. Bridges⁸⁰ studied 104 delinquents at the Boys Farm, Shawbridge. He estimated that 60% came from broken homes;⁸¹ the absence of the father was more frequent than that of the mother.

(e) E. L. May⁸² reports that of 2,000 criminals, 66% came from broken homes and 64% were unmarried. His group is ill-defined and no control figures are cited.

Ibid., 1922, 6, 3, 14----

⁷⁶"Is the young criminal a continuation of the neglected child?" J. Delinq., 1928, 12, 97-121.

⁷⁹Delinquency and the ex-soldier. Ment. Hy

⁸⁰Factors contributing to juvenile delinquency, 1927, 17, 531-580.

⁸¹'Broken home' means the separation of the parents, for whatever c

⁸²Survey of criminal statistics. J. Delinq., 1927, 11, 279-293.

(f) F. G. Bonser⁸³ compared the census survey of a delinquent and a non-delinquent group. Of 200 delinquent school boys, the fathers of 20% were dead; of 235 public school boys, the fathers of 6% were dead; of 78 delinquent girls, the fathers of 63% were dead; of 238 public school girls, the fathers of 5% were dead.

Other studies⁸⁴ have presented data in regard to the economic status of the home, the identity of the missing parent, the cause of the separation of the parents, the nationality of the parents, the number of other offenders in the family, and the like. The most consistent finding appears to be the presence in delinquent groups of large percentages of children from broken homes and of foreign-born parentage. In these studies, again, lack of adequate control figures makes it difficult to estimate the significance of these factors.

(g) C. Burt⁸⁵ studied 113 English prostitutes and found that only 7.1% came from really poor homes, while 30.1% came from comfortable families. But here, too, no control group was employed and the economic aspects of the environment lacked precise definition. Other studies have been made of the previous occupation and home life of prostitutes, but they are all similarly inconclusive.⁸⁶

⁸³Cleveland Recreation Survey. School work and spare time. Cleveland. The Survey Committee of the Cleveland Foundation, 1918, pp. 32-33.

⁸⁴S. and E. T. Glueck, 500 criminal careers. New York. Alfred A. Knopf, 1930; W. Healy and A. F. Bronner, Delinquents and criminals. New York. The Macmillan Co., 1926, Sub-commission on Causes and Effects of Crime. From truancy to crime. Albany: The Crime Commission of New York State, 1928, S. P. Breckinridge and E. Abbot, The delinquent child and the home. New York. Charities Publication Committee, 1912. E. H. Johnson (School problems in behavior. Hartford, Conn.: Hartford Seminary Foundation, 1925) contains statistics in tabular form covering a wide range of specific items, but inferences respecting groups of these items are rendered more or less impossible because the categories in each group are not mutually exclusive.

⁸⁵Cause of sex-delinquency in girls. Health and Empire, 1926, 1, 251-271.

⁸⁶See Fernald, Hayes and Dawley, *infra* p. 143, Katharine B. Davis, A study of prostitutes committed from New York City to the State Reformatory for Women at Bedford Hills. Supplementary chapter in George J. Kneeland, Commercialized prostitution in New York City. New York. The Century Co., 1913.

IV. RESEARCHES CONDUCTED BY THE CENSUS METHOD.⁸⁷

These investigations can be subdivided into the following groups:

- (1) The relation between domestic or familial factors and criminality.
- (2) The relation between various economic factors and criminality.
- (3) The relation between alcoholism and drug addiction and criminality.
- (4) The relation between the specific characteristics of a community and criminality.

(1) *The relation between domestic or familial factors and criminality.*

(a) E. H. Shideler⁸⁸ discovered from a census of 7,598 delinquents in industrial schools in 31 states that 50.7% came from broken homes. He offered as a comparative figure an estimate based on the 1910 census, that 25.3% of the total child population came from broken homes.

(b) C. Owings⁸⁹ reports that out of 255 cases which appeared before the *Tribunal pour Enfants* of Paris, 150 came from broken homes.

⁸⁷As we have already pointed out, the census method is a compilation, and often a statistical treatment, of data already gathered and manipulated rather than a first-hand investigation by some kind of primary observational technique. Inasmuch as the data which we are about to present have often been collected in the first instance either by the test method or by the psychological or sociological use of the case history method, it should not appear surprising that some of them, such as the researches dealing with factors in the domestic situation, seem very much like the researches which we have already considered. It must be borne in mind, however, that the census method is often applied to data obtained neither by the test nor by the case history method but by some other technique of observation.

⁸⁸Family disintegration and the delinquent boy in the United States. *J. Crim. Law and Criminol.*, 1918, 8, 709-732.

⁸⁹Le tribunal pour enfants. Paris: Les Presses Universitaires de France, 1923, p. 66.

(c) G. M. Wilson⁹⁰ made a study of 620 admissions to the New Jersey State Home for Boys in 1924-1925 and found that 122 or 20% came from broken homes; the nearest comparable estimate he presents is that derived from the survey of 10,000 cases in seven juvenile courts made by the Children's Bureau at Washington. Of the latter cases 40% were found to come from broken homes.

(d) The United States Census Bureau⁹¹ estimates, for the year 1923, the proportion of juvenile delinquents coming from broken homes at 46%.

While control groups were employed in the following studies, their use of them is characterized by a failure to equate relevant variables, particularly socio-economic status.⁹²

(e) S. B. Crosby⁹³ found that of 314 boys appearing before the Alameda county juvenile court in 1926, 45.5% came from broken homes. She estimated from the 1920 census of Alameda county that 26.2% of the total population came from broken homes. The estimate based upon the census was not a comparable one since it took account only of separations due to death or divorce, and ignored separations for other reasons.

(f) The United States Census Bureau⁹⁴ has published a report containing a good deal of information in regard to the characteristics of 19,080 persons who were committed to state and federal penal institutions during the first six months of 1923. Comparisons are made with various census estimates for the general population. While in 1920 51.4% of the general population lived in urban and 48.6% in rural districts, 77.8% of the prison

⁹⁰Adaptation of treatment to cause in male juvenile delinquency. J. Crim. Law and Criminol., 1927, 18, 207-217.

⁹¹Department of Commerce, Bureau of the Census, Children under institutional care, 1923. Washington Government Printing Office, 1927.

⁹²The same criticism is pertinent to those studies which purport to show the disproportionate number of negro offenders to the general negro population.

⁹³A study of Alameda county delinquent boys, with special emphasis upon the group coming from broken homes. J. Juv. Res., 1929, 13, 220-230.

⁹⁴Department of Commerce, Bureau of the Census, The prisoner's antecedents. Washington. Government Printing Office, 1929.

group were imprisoned for crimes committed in urban, and only 22.2% for crimes committed in rural, sections. As regards educational background, it was estimated that the ratio of commitments per 100,000 of the adult population was 42.7 for the illiterate as against 27.3 for those able to read and write; and that the ratio of prisoners with a college education was 14.3 per 100,000, this being the lowest for the literate group. With regard to economic status it was found that the weekly earnings of the prisoners were not materially lower than the earnings of persons gainfully employed in manufacturing. Recidivism was frequent. 50.5% of those in prisons and reformatories and 46.8% of those in jails and workhouses had previously been imprisoned one or more times. The ratio of commitments for divorced prisoners per 100,000 of the general population was 201.9 for males and 24.1 for females, as contrasted with a total commitment ratio of 48.4 for males and 3.4 for females. Taking the divorced prisoners by sex and five year age groups, the highest ratio, 642, was found for males between 20 and 24 years of age.⁹⁵

While these figures deserve attention because of the great populations studied, they are of relatively little significance because comparisons are made with groups of the general population which are not comparable for such factors as age, economic status, geographical location and the like. In addition, the figures for the general population are frequently rather rough estimates which are not comparable in accuracy with the data regarding the prison group. Their significance is diminished also by the fact that since commitments are an unreliable index of criminality, the prison group may not have been a fair sampling of the criminal population.⁹⁶

⁹⁵It is probable that a large number of the divorces, imprisonment or the criminality of the prisoners. It is therefore as to the significance of divorce from these figures.

⁹⁶Other recent census material of this type may be found in Department of Commerce, Bureau of the Census, Prisoners, 1923 Washington Government Printing Office, 1926; Department of Commerce, Bureau of the Census, Prisoners in state and federal prisons and reformatories, 1926 Washington Government Printing Office, 1929. A number of other bulletins are available for the United States and for the various states.

Some of the studies reported bear upon slightly different aspects of the domestic situation.

(g) One estimated that more than 20% of the male prisoners and more than 40% of the female prisoners committed to state and federal reformatories in 1923 were not living with their spouses at the time of the commission of their crimes.⁹⁷

(h) The United States Census of 1910⁹⁸ gives figures indicating that there were then twice as many foreign-born as native-born whites in prison in proportion to their respective numbers in the population. It qualifies this statement by pointing out a number of factors which minimize the significance of these figures. At the time of the census only 5.7% of the foreign-born white population were under 15 years of age, as contrasted with 36.6% of the native-born; when offenders in the two groups 15 years of age and over are compared, it is discovered that the foreign-born had only 1.3 instead of 2 times as many commitments as the native-born. Furthermore, the immigrants lived for the most part in the large cities, and it is indicated that the urban crime rate is higher than that of the general population. As a matter of fact, later studies have shown that the native whites have higher crime rates than the foreign-born. In some localities and under some conditions, the rate is twice as high.⁹⁹

(2) The relation between various economic factors and criminality.

(a) W. A. Bongers¹⁰⁰ reports a number of comparisons of various price series and series of criminality indices made by

⁹⁷Department of Commerce, Bureau of the Census, *The prisoner's antecedents*, pp. 25-26.

⁹⁸Department of Commerce, Bureau of the Census, *Prisoners and juvenile delinquents in the United States, 1910* Washington. Government Printing Office, 1918

⁹⁹See Sutherland, *Criminology*, p. 99.

¹⁰⁰*Criminality and economic conditions* Trans by H P Horton. Boston: Little, Brown, and Co., 1916. See especially Part 1, Ch. 2 and Part 2, Ch. 2. This work contains an excellent review of the earlier literature on the subject. Other valuable discussions of the literature are to be found in M. Parmelee, *Criminology* New York: The Macmillan Co., 1923, Ch. 6, and D. S. Thomas, *Social aspects of the business cycle*. London: G. Routledge & Sons, 1925.

himself and other investigators. Their technique, at its best, was to plot criminality curves and economic indices and compare the two by direct inspections. Bonger concluded that "the part played by economic conditions in criminality is preponderant, even decisive." B. Brasol¹⁰¹ and D. S. Thomas¹⁰² have pointed out that the conclusions which he reports are not warranted by the evidence he has set forth.

(b) G. R. Davies¹⁰³ obtained a coefficient of correlation of $-.41 \pm .13$ between the number of admissions to the New York State Prisons and wholesale prices for the period 1896 to 1915. D. S. Thomas has pointed out that this period is too short to make it possible to secure a reliable correlation. It should also be noted that the rate of prison admissions taken alone is an unreliable index of criminality. The applicability of the technique of correlation to these data is questionable.

(c) W. R. Ogburn and D. S. Thomas¹⁰⁴ took the unweighted averages of nine economic indices, falling within the years 1870-1920, and correlated them with the number of convictions for criminal offenses in New York State for the same period. They obtained a coefficient of correlation of $-.35 \pm .08$. The record of convictions was incomplete and, in addition, inferior as an index of criminality to the indices by which economic conditions were measured.

(d) Probably the most elaborate and carefully executed statistical study of census figures bearing upon the relation between economic conditions and criminality is the later research of D. S. Thomas.¹⁰⁵ It is sufficient here to record her conclusion that the negative coefficients of correlation she obtained between the business cycle (based on an elaborate series of indices of economic conditions) and various crime rates in Great Britain

¹⁰¹The elements of crime. New York Oxford University Press, 1927, pp. 81-87.

¹⁰²Social aspects of the business cycle

¹⁰³Social aspects of the business cycle. Quar. J. Univ. N. D., 1922, 12, 107-121

¹⁰⁴Of the influence of the business cycle on certain social conditions. Am. Statistical Assoc., 1922, 18, 324-340

¹⁰⁵Social aspects of the business cycle, pp. 135-144.

and Wales were on the whole not high enough to give clear evidence of any strong connection between the two, although the statistical procedure is only justified by an *a priori* assumption of some relation between economic conditions and criminality.¹⁰⁶ The only exception is in the case of violent offenses against property (burglary, house and shop-breaking, and robbery). For the whole period studied, 1857-1913, the maximum coefficient, $-.44$, occurred with synchronous items, and a moderate coefficient, $-.37$ with items lagging one year. The constancy of these coefficients and the fact that they were always high enough to be significant, is some evidence of a real relationship between this class of crimes and the business cycle,—a definite tendency to increase in a business depression and to decrease with prosperity.

(e) H. A. Phelps¹⁰⁷ obtained poverty indices for the city of Providence for the years 1898-1926, based on the combined records of indoor and outdoor relief, and correlated them with the crime rates of the Superior Court of the two most populous counties in Rhode Island for the same period. He obtained a coefficient of correlation of $+.33$ between poverty and the total amount of crime. He also obtained a number of other coefficients between specific classes of crime and indoor relief, outdoor relief, and the poverty index based on their combination. These tended to be lower. Phelps does not state the reliability of his coefficients. His poverty index appears to be inferior to the combined indices employed by Thomas as measures of the business cycle.

Although the indices employed as measures of economic conditions are still the subject of dispute among economists, these

¹⁰⁶Commenting on her own work, Dorothy Thomas writes "In my study of the social aspects of the business cycle, my aim was to get an objective expression of the relationship between the cyclical movements in business and in social series. There was reason to believe that economic influences played an important part in determining fluctuations in certain social phenomena. There was then a good deal of *a priori* evidence that social phenomena reflected business conditions." And she goes on to say that the series of social phenomena which she studied "were accepted on the *a priori* basis outlined in the foregoing. No series was utilized if there was no independent evidence that would lead to an anticipation of a relationship (This independent evidence was, however, often of a scanty and inadequate sort.)" Statistics in social research. *Am. J. Sociol.*, 1929, 35, 1-17.

¹⁰⁷Cycles in crime. *J. Crim. Law and Criminol.*, 1929, 20, 107-121.

studies suffer much more from a lack of adequate indices of criminality. It is known that the crime indices which they employ are influenced by such accidental circumstances as the efficiency of law enforcement agencies and changes in penal administration and police efficiency. The number of crimes reported to the police is generally regarded as a more reliable index of crime activity than the number of arrests, convictions, or commitments.

(f) R. McIntire¹⁰⁸ studied the federal report of 1911 on Juvenile Delinquency and its Relationship to Employment. Records of 4,839 delinquents showed that 2,767 had at some time been employed and that 2,072 had never been employed. The working children were responsible for 5,471 offenses, the non-working children for 3,326 offenses. Both groups ranged from 6 to 16 years. An examination of their home and familial conditions showed that on the whole the domestic environment of the working children was superior. Only one-fifth of the working boys as opposed to nearly one-third of the non-workers came from distinctly bad homes, while the proportion of workers and non-workers that came from fair to good homes was as 76 to 65. These comparisons are crude. The classifications are unreliable and the reliability of the differences between the two groups is not stated.

A number of other studies have been reported showing the distribution of various criminal and delinquent groups for economic and occupational status. While there appears to be a large proportion of unskilled and semi-skilled laborers in penal institutions, it has not been satisfactorily shown that the proportion is greater than that in the general population.

(3) The relation between alcoholism and drug addiction and criminality.

A great many statistical studies have been performed in the attempt to discover the relationship between alcoholism or drug

¹⁰⁸Child labor and juvenile delinquency. J. Delmq., 3, 1918, 95-114.

addiction and criminality. These have generally taken the form of enumerations of (1) the proportion of offenses committed by alcoholics or drug addicts (Researches (a)-(e)), (2) the proportion of drug and liquor addicts who have committed crimes (Researches (f)-(g)), and (3) comparisons of the percentages of alcoholism, intoxication or drug addiction among various classes of criminals (Researches (h)-(l)).

(a) W. A. Bonger¹⁰⁹ cites some of the earlier statistics on alcoholism and crime. For example, M. Masoin found that 44.7% of 2,588 convicts sentenced for at least five years at Louvain were addicted to drunkenness; Morel, that 53.9% of 325 recidivists at Mons were given to alcoholic excesses; Dalhoff, that 27% of 2,982 prisoners at Vridsloselille, Denmark, were drunkards; Malgat, that 56.3% of 1,850 prisoners at Nice drank; Baer, that 41.7% of 32,837 German prison inmates were drinkers and 19.6% habitual drunkards; Marro, that 74.7% of 507 Italian criminals were addicted to the excessive use of alcohol; Bonger himself, that 13% of convicts in the Netherlands in 1901 were habitual drunkards; Brace, that 81.6% of 1,093 prisoners in the Albany penitentiary were drunkards and 61.6% of 49,423 criminals in New York City prisons were habitual drunkards; Evart, that 27.3% of 18,049 recidivists in Prussian houses of correction were habitual drunkards; Schaffroth, that 39.9% of 2,201 Swiss penitentiary inmates were drunkards; and Sichart, that 29.5% of 3,181 Wurtemberg prisoners were habitual drunkards.

(b) M. H. Smith¹¹⁰ examined the criminal statistics of Staffordshire for three years (1911-1913) and concluded that alcohol was responsible for more than one-half of the male prison receptions and for a much larger proportion of the female receptions; that a high rate of alcoholic offenses (those where alcohol usually is an immediate cause of crime, such as assault, obscene exposure, etc.) is usually but not invariably accompanied by a high rate of non-alcoholic offenses (those where alcohol is usually not a

¹⁰⁹*Op. cit.*, pp. 509-515

¹¹⁰Crime, alcohol and other allied conditions in Staffordshire. J. Ment. Sci., 1915, 61, 98-108.

cause of crime) and by crimes of violence, by pauperism and by insanity.

(c) F. E. Haynes¹¹¹ reports that of the cases examined by the Massachusetts Department of Mental Diseases from Massachusetts county penal institutions, 42% suffered from alcoholism.

(d) The Department of Correction of New York City¹¹² reports that of 60,193 men and 9,199 women received from the courts by the Department of Correction of New York City in 1928, 48 of the men and 9 of the women had used liquor freely, and 22,716 of the men and 2,507 of the women had used liquor moderately.

(e) G. Kuhne¹¹³ reported that of 16,675 inmates of New York penal institutions 14.75% used narcotics.¹¹⁴

Work of this nature has thus far been inconclusive because of the absence of knowledge as to the alcoholism and drug addiction rates in the non-criminal population. For instance, the thesis has frequently been advanced in the criminological literature that ". . . the percentage of chronic alcoholics is so great among the criminals, that we can affirm that among the non-criminals the percentage is very small".¹¹⁵ This assumption seems hardly justified.

Such variances in percentage figures as may be found in the studies cited by Bongers are largely attributable to the unreliability of such classifications as 'alcoholic', 'drunkard', 'habitual drunkard' and the like. The dividing line between such classes as 'occasional drinker', 'occasional drunkard' and 'habitual drunkard' does not appear to be very distinct, and, as Bongers and

¹¹¹Criminology. New York McGraw-Hill Book Co., 1930, p. 73.

¹¹²City of New York, Report of the Department of Correction for the year 1928, p. 95.

¹¹³Conference on Narcotic Education. Hearings before the Committee on Education, House of Representatives, 69th Congress, 1st Session. Washington: 1926, pp. 157-175.

¹¹⁴For similar estimates of the extent of drug addiction among criminals see Conference of Committees of the World Narcotic Defense Association, Draft of uniform state narcotic defense law. Washington World Conference on Narcotic Education, 1927.

¹¹⁵Bongers, *op. cit.*, p. 509.

Kinberg have pointed out, these classes are frequently confused and are variously interpreted by different investigators.

(f) The New York Police Department in 1921 found a record of criminality in 65% of the narcotic arrests. As a result of improved identification records this figure was raised in 1923 to 80%.¹¹⁶

(g) A report on drug addiction in California asserts that of the men serving sentences on narcotic charges during August, 1926, in Los Angeles City and County jails and in State and Federal penitentiaries, 50% had previous criminal records.¹¹⁷

The figures above enumerated are difficult to interpret because they fail to distinguish between convictions for violations of narcotic or liquor laws and convictions for other offenses. In the last two studies it may be observed that only narcotic law arrests and sentences were studied.

(h) O. Kinberg¹¹⁸ studied Swedish criminals convicted in 1908 in order to ascertain what proportions of the various types of crimes committed by them, had been committed by alcoholics who were not at the time in a state of intoxication. He found the highest percentage (23.88%) in the case of sexual crimes and the lowest (1.51%) in the case of crimes of theft. Among the crimes committed by offenders while in a state of intoxication, domiciliary trespasses furnished the highest percentage (84.95%), and forgeries the lowest (13.54%); the percentage for sexual crimes was 38.81% and for thefts 3

(i) Bongers¹²⁰ cites the following figures for sexual crimes: 51.5% of sexual offenses in France, 10.84% of sexual offenses in the Netherlands and 36.3% of crimes against morals in Wurtem-

192.

¹¹⁶Alcohol and criminality J Crim Law and Criminol, 1914, 5, 569-589.

¹¹⁹Goring found that the most alcoholism was to be found among those guilty of crimes of personal violence and the least among those guilty of the fraudulent crimes, with sex offenses, incendiary offenses and theft occupying a median position. (The English convict. London H. M. Stationery Office, 1913, p. 286.)

¹²⁰*Op. cit.*, pp. 511-515, 619-620.

berg, were committed by chronic alcoholics; 25.7% of 179 cases of rape in Austria, 11.82% of sexual crimes in the Netherlands, 6.6% of rapes and indecent assaults in France and 36% of indecent assaults in Sweden were committed by persons in a state of intoxication or under the influence of liquor.

(j) J. D. Jackson¹²¹ found that there were no cases of drug addiction among 240 bandits; and that the incidence of chronic alcoholism was slight and somewhat less than that found among 1,074 non-bandits in the New Jersey State Prison.¹²²

(k) An association has frequently been reported between recidivism and alcoholism. Thus M. R. Fernald, M. H. S. Hayes and A. Dawley¹²³ report that of 133 cases in New York penal institutions classified as alcoholic, the average number of previous convictions was 5.35, whereas for 431 cases classified as non-alcoholic and moderate drinkers the average number of previous convictions was only 2.285. Unfortunately the alcoholic group included 21 cases whose major offense was or directly involved intoxication. Members of this group appeared to be frequently arrested for intoxication and given short sentences and discharged, and then rearrested on the same charge. It is clear that short term offenders of this type have greater opportunity for recidivism than many other types of offenders. Comparisons can only validly be made between groups with comparable opportunities for recidivism. A similar criticism may be made of many of the studies of the relation of alcoholism and recidivism.

Studies have been made of the relationship between the alcoholism of parents and the delinquency of their children.

¹²¹A comparison of bandits with other prisoners at the New Jersey State Prison. Manuscript, 1930. Jackson also found that the bandit group had a higher median mental age, a higher percentage of constitutional defectives and a higher percentage of native whites of Italian parentage than the non-bandits.

¹²²The U. S. Treasury Department (Treasury Department, Special Committee of Investigation, Traffic in narcotic drugs. Washington: Government Printing Office, 1919, p. 11.) reports that drug addicts were most frequently arrested for larceny, burglary and robbery and least frequently for drunkenness, murder and forgery.

¹²³A study of women delinquents in New York State. New York: The Century Co., 1920, p. 157.

(1) A. Channing¹²⁴ examined the court records of 2,378 delinquents whom the Central Boston Juvenile court had referred to the Judge Baker Foundation; they belonged to 2,155 different families. He found that at the times that these children visited the clinics (1) 47% of the fathers who were not living with their families as contrasted with 37% of those who were, had previous alcoholic records; (2) 15% of the mothers who were not living with the fathers as contrasted with 6% of those who were, also had such records. He also found (3) that 79% of 392 of the fathers who had been reported for desertion and non-support had such records; and (4) that during the year previous to the appearance of their respective children in court 20% of the fathers or persons taking their places¹²⁵ and 4% of the mothers or persons taking their places, had such records. Such control figures as were employed do not appear to have been strictly comparable.¹²⁶

A number of writers have suggested a correlation between the amount of alcohol or narcotics consumed in a community and the rate of criminality or of some type of criminality, particularly offenses against the person. Such studies as have been made, however, have failed to consider sufficient periods of time, when employing time-series comparisons, or have failed to use sufficiently comparable national or local groups, when using group comparisons. On the whole, therefore, they have not resulted in any significant correlations.¹²⁷

In general it appears that the studies of the relationship of alcoholism and crime and of drug addiction and crime have

¹²⁴Alcoholism among parents of juvenile delinquents. Soc. Service Rev., 1927, 1, 357-383

¹²⁵Where the parent was not in the home the information was obtained for the step-parents or the relative who took the father's place.

¹²⁶A number of other reports have been made of the percentage of alcoholism among the parents of juvenile delinquents. Healy and Bronner report that 28.5% of 2,000 juvenile delinquents in Chicago and 45% of 2,000 juvenile delinquents in Boston had one or both parents alcoholic. (Delinquents and criminals. New York: The Macmillan Co., 1926, p. 265.) See discussion of Dahlstrom, p. 124, *supra*, and Lund, p. 153.

¹²⁷See E. Ferri, Criminal sociology. Trans. by J. I. Kelly. Boston: Little, Brown, and Co., 1917 and C. Simonin, L'état d'ivresse. (Publications des "Etudes Criminologiques", No. 3.) Paris. Recueil Sirey, 1928.

neglected to take into account the correlative influence of such possibly significant concomitant factors as intelligence,¹²⁸ abnormality,¹²⁹ and socio-economic status,¹³⁰ and have also failed to investigate the factor of alcoholism or drug addiction with sufficient rigor. Furthermore, if L. Kolb's¹³¹ contention is tenable, that in the majority of cases criminal conduct precedes narcotic addiction and is not caused by it, that criminality is, in fact, somewhat inhibited by addiction to drugs, it is quite obvious that previous studies which have examined the addiction rate among criminals, are quite inadequate if they have failed to determine whether the use of drugs preceded the criminal career. Moreover, while Kolb admits the possibility that crimes of theft are increased by the individual's need of money to purchase the drug, he holds the unorthodox position that crimes of violence are reduced by the lowered aggressiveness of the drug user.

(4) *The relationship between characteristics of a specific community and criminality.*

(a) Probably the most ingenious statistical study that has been made of census records is that made by E. W. Burgess¹³² and C. R. Shaw¹³³ of delinquency areas in Chicago. They divided the city into regions in terms of their distance along a radius from the center of the city. These regions were then differentiated from one another in terms of various environmental factors, and the regions nearer the center of the city were found to be the inferior social environments. A positive relationship was found

¹²⁸See discussion of Goring, p 150 ff, *infra*. See also Special Committee on Investigation, Traffic in narcotic drugs.

¹²⁹See discussion of Anderson, p 116, and of Anderson, p 120, *supra*. See also J Koren, Alcohol and society New York Henry Holt and Co, 1916, pp 23-30

¹³⁰See G Schmollers, Soziale misstände und alkoholverbrauch. Allgem Staats Archiv, 1927, 17, 258-266.

¹³¹Drug addiction in relation to crime Ment Hygiene, 1925, 9, 74-89 He also challenges current estimates of the high rate of addiction among criminals, pointing out how a narcotic investigator's statement of 90% addiction at a large state prison was reduced to 10% upon a careful survey.

¹³²The determination of gradients in the growth of the city Pub Am. Sociol. Soc., 1927, 21, 178-184

¹³³Delinquency areas Chicago University Chicago Press, 1929 See also C. R. Shaw, Correlation of rate of juvenile delinquency with certain indices of community organization and disorganization. Pub Am. Sociol. Soc., 1928, 22, 174-179.

to exist between the amounts of delinquency in a given region and the proximity of that region to the city's center. Thus, in the first mile unit there were 443 delinquents per 1,000 of the boy population between the ages of 11 and 17; 58 in the second mile unit; 27 in the third mile unit; 15 in the fourth mile unit; 4 in the fifth mile unit; and none in either the sixth or seventh mile unit.

Further study of this material disclosed that the regions of high delinquency appear to be the areas contiguous to industrial or commercial districts in the process of changing from residential to business sections. In these regions gang life is highly developed¹⁸⁴ and living conditions appear to be distinctly unfavorable.

(b) H. M. Shulman¹⁸⁵ examined the police precinct in Kings County, New York, which had the highest rate of arrests for delinquency during the year 1925. This area was composed of sanitary districts bounded on one side by a rapidly growing business section and on the other three by waterfront. In another study¹⁸⁶ he surveyed a portion of District 1 of the Children's Court of the Borough of Manhattan, the district which led the Borough for delinquency in the years 1920-1924; although its population was only 21% of that of the Borough, the number of delinquents was 32% of the total number in the Borough. He obtained his data largely from court records. He found that the incidence of delinquency in the district was highest in the blocks with markedly inferior housing conditions and in the commercial areas.

(c) C. Burt¹⁸⁷ charted the map of London for the ratios of industrial school cases to total population in the various electoral

¹⁸⁴See F. M. Thrasher, *The gang*. Chicago: University Chicago Press, 1927.

¹⁸⁵Sub-Commission on Causes and Effects of Crime. *A study of delinquency in a district of Kings County*. Albany: The Crime Commission of New York State, 1927.

¹⁸⁶Sub-Commission on Causes and Effects of Crime. *A study of environmental factors in juvenile delinquency in a district of Manhattan Borough, New York City*. Albany: The Crime Commission of New York State, 1928.

¹⁸⁷*The young delinquent*. London: University of London Press, 1925. This book is based for the most part on the author's article "The casual factors of juvenile crime" (see *infra*, p. 155 ff). In addition to a more detailed and explicit analysis of the cases studied in the article, Burt, by his use of the census method, arrives at conclusions such as we here cite.

districts. He correlated the proportion of delinquency and the degree of overcrowding,¹⁸⁸ taking these two factors for each of the 29 boroughs as a whole, and obtained a coefficient of $+.77$ for the entire city. The coefficient between delinquency and poverty, based on figures for 1900, was similarly found to be $+.67$.¹⁸⁹ One hesitates to ascribe much importance to these correlations when one notes that they are based on only 29 cases (the twenty-nine boroughs) and on crude indices of the criteria correlated.

(d) P. V. Young¹⁴⁰ made a study along somewhat similar lines of the social history of the Russian Molokan colony which settled some twenty-five years ago in one of the inferior districts of Los Angeles. This district has since then shown a progressive deterioration: health problems, housing conditions and policing problems have become more acute; cheap amusement houses have increased in number; and a mixture of races, negroes, Mexicans and Armenians, with a variety of dialects and standards of living, have surrounded the original Molokan colony on all sides. In successive generations of Molokan children, more and more delinquent behavior has appeared, until at the time of Young's study it was practically universal. Young divided 265 boys in 108 families (about one-tenth of the total number of families) into three age groups: (a) 9-19 years; (b) 20-24 years; and (c) 25-29 years. The (c) group contained boys born in Russia, and the (b) group boys born in America within five years after the settling of their families in this country. Of the 188 boys in group (a), 82.5%, and of the 53 boys in group (b) 47.2%, had appeared before the juvenile court; whereas only one of the 24 boys in group (c) was delinquent. Since 1915 the number of offenders and

¹⁸⁸Burt defines an overcrowded home as a tenement with more than two adult occupants per room, two children under ten being considered the equivalent of one adult.

¹⁸⁹It is interesting to note that when Burt used the individual as a unit and compared the economic status of 200 delinquents with that of the London population as a whole, he found only a negligible correlation between poverty and delinquency. (The causal factors of juvenile crime. *Brit. J. Med. Psychol.*, 1923, 3, 1-33.)

¹⁴⁰Manuscript, reported in W. I. Thomas, Report to Columbia Criminological Survey, Manuscript, 1930. Section 1, 44-47. See also *The Russian Molokan Community in Los Angeles*. *Am. J. Sociol.*, 1929, 35, 393-402.

the number of offenses per boy has steadily increased, and the offenses have become more serious in character. In the meantime the delinquency rate for Los Angeles as a whole, as registered by appearances in the Juvenile Court, has declined, owing in part to the fact that more cases are being disposed of without the intervention of the court.

V. RESEARCHES CONDUCTED BY A COMBINATION OF TWO OR MORE METHODS.

The following studies are to be distinguished from all that we have so far considered by the fact that each of them has not only concerned itself with a number of factors, but has attempted to a greater extent than those previously mentioned to study the interrelations of these factors. The various methods of criminological research must be considered as supplementary. None of them is an adequate technique for the investigation of all the human and environmental factors which may be related to criminality. One is a more useful way than another for studying a given factor. Thus, the test method and the psychological use of the case history method are adapted to the observation and measurement of the traits of individuals; the sociological use of the case history method, to the observation and measurement of aspects of the environment in which human beings live; and the census method, to the observation and measurement of human and environmental factors in larger populations.

Unfortunately, however, the researches which have combined two or more methods have, for the most part, undertaken a merely additive treatment of these factors. Only a few have combined methods of research in an effort to correlate the variables under observation. The latter we shall discuss at some length after briefly surveying the relatively less significant studies.

(a) V. V. Anderson¹⁴¹ has completed a number of studies characterized by the use of several methods. He compared 100 feeble-

¹⁴¹A comparative study of feeble-mindedness among offenders in court. *J. Crim. Law and Criminol.*, 1917, 8, 428-434.

mined and 100 psychopathic unselected cases from the records of the Municipal Court in Boston. He found that 32% of the feeble-minded and 82% of the psychopathic cases had gone further than the 5th year of grammar school; that 38% of the feeble-minded and 69% of the psychopathic were self-supporting; and that 84% of the psychopathic were of normal intelligence.

(b) In a study of drug addicts,¹⁴² he found 48.5% subnormal and feeble-minded, 14.2% psychopathic and 81.5% suffering from some mental handicap; 65.8% were not self-supporting.

(c) In a study of a group of 100 women¹⁴³ who had appeared before the Boston Municipal Court for offenses against chastity, he found that 20% were normal, 32% were dull normal, 30% were feeble-minded, 6% were epileptic, 2% had suffered alcoholic deterioration, 2% were drug addicts, 7% were psychotic and 1% were psychopathic.

(d) In still another study,¹⁴⁴ he found that 39.3% of first offenders as opposed to 84.2% of recidivists were suffering from serious mental handicaps.

(e) P. E. Bowers¹⁴⁵ conducted a survey of 2,500 prisoners at the Indiana State Prison. 401 were in poor physical condition; 75% were capable of only unskilled labor; 44% had psychopathic heredity. 5% of all the crimes which these prisoners had committed were due directly or indirectly to narcotics. 675 tested as feeble-minded; 250 were diagnosed as insane; 200 as epileptic; 450 as psychopathic. 20% of the prisoners were colored, whereas the proportion of negroes to whites in Indiana was 2¼%.

(f) E. A. Doll¹⁴⁶ examined the records of 152 inmates of the New Jersey State Prison with reference to the following items:

¹⁴²Drug users in court. *J. Crim. Law and Criminol.*, 1917, 7, 903-906.

¹⁴³The immoral woman as seen in court. A preliminary report. *Boston Med. and Surg. J.*, 1917, 177, 899-903.

¹⁴⁴The immoral woman as seen in court. *J. Crim. Law and Criminol.*, 1918, 8, 902-910.

¹⁴⁵A survey of twenty-five hundred prisoners in the psychopathic laboratory at the Indiana State Prison. *J. Delinq.*, 1919, 4, 1-45.

¹⁴⁶A study of multiple criminal factors. *J. Crim. Law and Criminol.*, 1927, 11, 33-46.

nature of offense, previous record, minimum sentence, nationality, years of residence in the United States, age, mental age, schooling and psychological diagnosis. His purpose was to study the interrelated effects of these factors upon criminal behavior, rather than the influence of a single factor considered in isolation, as has been done in most of the reported criminological studies. He concluded that crime is definitely related to nationality, previous criminal record and psychological condition. However, his study was undertaken largely as a study in method, and he realized that the number of his cases was too small to warrant definitive conclusions regarding so large a number of factors.

(g) M. R. Fernald, M. H. S. Hayes and A. Dawley¹⁴⁷ studied some 500 female offenders over 16 years of age in six New York State institutions by the test and case history methods. Offenders reared in socially and economically inferior homes apparently tended to become delinquent or criminal at an earlier age than those from better homes.¹⁴⁸ However, no marked relationships were found between the type of home and the type or extent of criminality. While according to the 1910 census 23.7% of the New York female population over 15 were in domestic service, 42% of the offender group were domestics.¹⁴⁹ The proportion of foreign whites in the group of offenders from New York City was smaller than the proportion of foreign white females over 15 in the entire female population over 15 in New York City. However, there was a larger proportion of native whites of foreign or mixed parentage in the group of offenders than in the general population. The contrary was true of native whites of native parentage. When compared with 187 Cincinnati working and school girls, 29 mill operatives and 93,955 members of the army draft, the average mental capacity of the offenders was found to be inferior, although there was considerable overlapping of the distribu-

¹⁴⁷*Op. cit.*

¹⁴⁸The correlation ratio was $.31 \pm .044$. For 184 prostitutes included in the total group the ratio was $.29 \pm .067$.

¹⁴⁹For similar material see Report on Condition of Wage Earners in the United States. Vol. XV: M. Cuynington, Relation of criminality of women. Senate Doc. No. 67. Washington: Government Printing Office, 1911.

tions.¹⁵⁰ Offenders with a record of sexual irregularity were of lower average intelligence than those without such a record. Although the investigators attempted to secure a representative sampling of New York female offenders by selecting small groups from six institutions in which different types of offenders were confined, they would have secured more significant results (as well as better samplings) had they either increased the total number of cases or examined a sampling more representative of a single type of offender. Furthermore, the control groups do not appear to have been strictly comparable.

(h) A. T. Bingham¹⁵¹ studied 500 girls in Waverly House in New York who were sexual offenders. 71.6% came from broken homes; both parents of 62.5% were foreign-born; one parent of 12% was foreign-born; analysis of their biographies showed that 62.4% of them had been exposed to bad companionship, and that 15% indulged in low forms of amusement. 24.2% of the group were feeble-minded; 13% were of borderline mentality; and 17.6% were rated as temperamentally unstable.

(i) J. Matthews¹⁵² surveyed 341 delinquent girls at the Whit-tier State School. More than 50% came from broken homes. Their median intelligence quotient was .81 as compared with approximately 100 for Terman's 905 unselected public school children. Their median height was superior to the Smedley age norms and, in lesser degree, to two California public school groups; their median weight was superior to the Smedley norms. As rated by a questionnaire, 69% were active or excitable; about a third could be classified as emotionally unstable. Because of a difference in socio-economic status, the public school norms used in this research as a control were inapplicable.

(j) M. A. Merrill¹⁵³ studied 236 cases from the Santa Clara County Juvenile Court. The boys outnumbered the girls three

¹⁵⁰For similar material see J. Weidensall, *The mentality of the criminal woman*. Baltimore: Warwick & Yorke, 1916

¹⁵¹Determinants of sex delinquency in adolescent girls based on intensive studies of 500 girls. *J. Crim. Law and Criminol.*, 1923, 13, 494-586.

¹⁵²A survey of 341 delinquent girls in California. *J. Delinq.*, 1923, 8, 196-231.

¹⁵³Mental differences among juvenile delinquents. *J. Delinq.*, 1926, 10, 312-323.

to one; 45% of the girls' offenses were against chastity; 61% of the boys' offenses were against property. The fathers of the major part of the whole group were skilled or unskilled laborers; 45% of the parents were American born; 3.6% came from broken homes; and 66.6% had an I. Q. below 90.

(k) C. H. Calhoun¹⁵⁴ made a comparative study of 100 normal (Group A) and 100 mentally deficient (Group B) boys. Group B had a larger proportion of foreign-born parents. 45% of Group B and 31% of Group A came from broken homes. The boys in Group A had a total of 206 and those in Group B a total of 125 court appearances. Those in Group A committed more offenses against property than those in Group B; stealing, 198 against 43; forgery, 19 against 5; burglary and larceny, 16 against 6. But the boys in Group B committed more offenses of truancy (45 against 13) and immorality (15 against 4). Group A had the greater number of institutional placements (85 against 30). Unfortunately no diagnostic study of other personality traits of these two groups was made.

(l) M. S. Brill¹⁵⁵ made a comparative study of two groups, each of 20 delinquents, one with I. Q.'s below 90 and the other with I. Q.'s above 110. The case history study of the combined groups revealed that of the 40 cases, 50% had been unfairly graded in school and 25% were truants because they disliked their teachers; 30% were reported as physically restless at school and the stealing occurring in 25% of the cases was motivated by a desire for things not supplied at home. Further diagnosis of the case histories revealed that the general motivation of the superior children was mainly defensive, while that of the inferior group was mainly aggressive. The superior children came from more abnormal home settings. 9 of the superior group came from broken homes whereas only 2 of the inferior group came from such homes; insanity was present in the families of 4 superior children as compared to only one case of insanity in the less intelligent group.

¹⁵⁴A follow-up study of 100 normal and 100 subnormal delinquent boys. *J. Delinq.*, 1928, 12, 236-240.

¹⁵⁵Motivation of conduct disorders in boys. *J. Delinq.*, 1927, 11, 5-22.

Brill concluded that it takes more unfavorable circumstances and a greater number of motives to upset the superior than the inferior child. As Brill himself appreciates, 40 cases is far too few for an adequate statistical comparison.

(m) M. H. Erickson¹⁸⁶ examined 1,690 white male adult prisoners in Wisconsin penal institutions. He found 50% with an I. Q. below 90, as compared with Terman's finding of 20% for a group of unselected school children. 30% of the prison group were feeble-minded, as compared with Gillin's estimate of about 2% for the population at large. 37% of the prison group came from broken homes, as compared with Shideler's estimate of 25% for the general population. These control indices are obviously unsatisfactory. Erickson found no significant differences in the intelligence of the prisoners when classified according to their offenses.

(n) W. T. Root¹⁸⁷ undertook a psychological and educational survey of 1,916 prisoners in the Western Penitentiary in Pennsylvania, using mental tests, the Woodworth Psychiatric Questionnaire and case histories. He found the median I. Q. of those committed for predatory crimes to be 80.3; for sex crimes, 72.8; for crimes of violence, 70.2; and for all crimes, 76.2. 61% of the prison population had not received a common school education commensurate with the potentiality of their general intelligence. Using the Woodworth Questionnaire, he found that 11% of the entire group were "probably psychopathic". Prisoners convicted of arson, sodomy and rape contained the highest percentages of "probably psychopathic" cases, and those convicted of embezzlement, forgery, felonious assault and larceny, the lowest. Among the racial differences observed, it is interesting to note that 70% of the Italians in the group committed crimes of violence, while 70% of the native-born Italians committed predatory crimes; the greatest crime frequency, as based on an index of 1 for the native

¹⁸⁶A study of the relationship between intelligence and crime. *J. Crim. Law and Criminol.*, 1929, 19, 592-635.

¹⁸⁷A psychological and educational survey of 1916 prisoners in the Western Penitentiary of Pennsylvania. Board of Trustees of the Western Penitentiary, n. d.

whites, was to be found among the negro group, with an index of 13.69.

(o) T. E. Sullenger¹⁵⁸ found that 50.7% of 1,145 delinquents in Omaha came from broken homes. 70% of the cases appeared to be members of gangs. 15% of 119 news-boys were delinquent, which is 4.8 times the normal juvenile delinquency rate in Omaha. Negroes appeared to contribute more than their proportionate share of the delinquent population. He states that a high correlation existed between the rate of juvenile delinquency and the density and mobility of the populations examined. This conclusion, as far as it concerns mobility, is invalidated by the paucity of cases considered and the failure to establish criteria for the amount of mobility in the general population.

(p) F. G. Ebaugh, G. S. Johnson and L. F. Wooley¹⁵⁹ examined the records of the cases that had come before the Denver County Juvenile Court from 1909 to 1928. They discovered that over a five-year period 43% of 1,178 cases came from 15% of the total City area. The areas with the highest delinquency rates appeared to be those between business and residential zones.¹⁶⁰ They also found that 40% of 2,892 cases came from broken homes. As a part of the same study they examined more intensively 100 unselected boys in the State Industrial School at Golden, Colorado. This group as a whole appeared to be in normal physical condition. 54% came from broken homes and in 36% of the cases there was a previous record of delinquency or crime in the family 18% were mentally deficient and 29% either borderline or dull normal. Psychiatric analysis seemed to show that the behavior responses in 35 cases represented direct attacks upon the difficulties or situations that were encountered, and in 18, a withdrawal from the difficulty or situation; 47 displayed an inferior type of reaction corresponding with the incidence of mental defect.

¹⁵⁸Social determinants in juvenile delinquency. Omaha, Neb.: Douglas Printing Co., 1930.

¹⁵⁹Studies in juvenile delinquency in Colorado (No I. One hundred boys.) iv of Colo. Stud., 1930, 18, 9-27.

¹⁶⁰See p 139, *supra*.

(q) One of the most carefully executed of the investigations which have employed a number of methods of research is that performed by S. Glueck and E. T. Glueck¹⁶¹ as part of their intensive examination of the careers of 510 inmates of the Massachusetts Reformatory. The Gluecks found that over half of these criminals belonged to families some members of which had been arrested or committed prior to their own imprisonment, and that an additional 29% belonged to families in which delinquencies such as drunkenness or immorality were present, although the offenders had never been arrested. 15% of the families were dependent economically; 56% more were in "marginal" circumstances. In only 13% of the cases had one or both parents attended even the common school. At least 60% of the cases came from broken homes. The proportion of native-born persons of foreign or mixed parentage in the reformatory group was about two and one-half times the ratio for the male adult population of Massachusetts. On the other hand, the proportion of foreign-born of foreign parentage in the group was only about two-fifths of that in the general population. The reformatory inmates came from families appreciably larger than the average Massachusetts family. The Gluecks also found that the more densely populated districts contributed a disproportionate number to the criminal group. The psychological findings (on 384 cases) were that about one-half of the men were of dull or of borderline intelligence, and 21% feeble-minded; 3% had definite psychoses, 18% were psychopaths; and 9% were classified as drug or alcoholic deteriorates, sex perverts or congenital syphilitics. Vicious habits were common among members of the group and appeared more frequently in combination with other vicious traits than singly. In spite of the Gluecks' use of two or more methods of research and their concern with a number of different factors, it is difficult to interpret the data which this interesting study

¹⁶¹500 criminal careers New York Alfred A. Knopf, 1930 Here, as elsewhere, no attempt has been made to summarize all the data yielded by the study but only enough to indicate its scope and general character. The research of the Gluecks was primarily to determine the results of parole, a problem in treatment, and we discuss it later more fully in that connection. See p. 201 ff., *infra*.

has assembled. The absence of control groups is probably its basic defect; only comparison groups were employed.¹⁶² In addition, the investigators failed to obtain data of equal reliability for the various factors investigated. Thus, intelligence was determined by intelligence tests, while domestic felicity was determined by an index, the precise significance and reliability of which is not known. Again, psychiatric diagnoses of abnormality are the source of one series of data and intelligence tests the source of another. Such data are not strictly comparable. Therefore, percentages or percentage differences which are derived from them do not adequately exhibit the relative significance of the different factors.

(r) A word should also be said about the work of Healy and Bronner¹⁶³ who have studied delinquents and criminals over a long period of time. Their investigations have been conducted mainly by various kinds of psychological tests, supplemented by psychiatric and psychoanalytic diagnosis. In many instances they have reported quantitative summaries with respect to one or another of the possible causal factors, but their work, as a whole, has not been integrated. It has not revealed the interrelations of a large number of factors operating in delinquent and control groups. Their researches must, nevertheless, be recognized as among the best exploratory work in criminology, and they have undoubtedly been both the background and the guide for many other studies.¹⁶⁴

It remains to consider several studies which appear to be the major researches so far completed in causation. These studies are distinguished for comprehensiveness of scope, for methodological ingenuity and for some statistical competence. They seem

¹⁶²See p 103, *supra*

¹⁶³W. Healy, *The individual delinquent*. Boston Little, Brown, and Co, 1915, *Mental conflicts and misconduct*. Boston Little, Brown, and Co, 1919 A. F. Bronner, *A comparative study of the intelligence of delinquent girls*. New York: Teachers College, Columbia University, 1914, *A research on the proportion of mental defects among delinquents* J. Crim. Law and Criminol., 1914, 5, 561-568; *The apperceptive abilities of delinquents*. J. Delinq., 1922, 7, 43-54. Healy and Bronner, *Youthful offenders*. Am. J. Sociol., 1916, 22, 38-52, *Delinquents and criminals, their making and unmaking*. New York The Macmillan Co., 1926.

¹⁶⁴Some of the more interesting of their findings are reported on pp. 183-184, *infra*.

to represent the best research which can be done in the present undeveloped state of criminological theory with the presently available research techniques. These investigations are, however, as inconclusive as the less elaborate studies. They are chiefly important as contributions to the methodology of research.

(s) C. Goring¹⁶⁵ analyzed a great variety of data relating to some 3,000 convicts, and made a series of interesting comparisons between various criminal and non-criminal groups. This work is distinguished by its statistical refinement,¹⁶⁶ to be expected of any research directed by Karl Pearson. Goring attacked Lombroso's anatomico-pathological method. Whereas Lombroso attempted to discover "anomalies" by unaided observation, using measurement only as a subsidiary device to confirm the results of observation, Goring insisted that physical abnormalities could be discovered only by precise anthropometric methods.

Goring divided his criminal group according to the crimes of which they had been convicted: damage to property, stealing and burglary, sexual offenses, violence to the person, forgery and fraud. When he compared each sub-group with the averages for the entire group, he found no significant differences for any of 37 anthropometric measurements. Some of these were unambiguously defined in terms of calliper measurements, but the personal judgment of the investigator entered into others in varying degrees. Comparisons between the total group of convicts and various non-criminal groups, including 1,000 Cambridge students, 959 Oxford and Aberdeen students, general hospital inmates, 118 military men and university instructors, revealed no significant differences in cranial measurement; in fact, college men differed more from one university to another than from some of the criminal groups. In these comparisons, age and bodily stature were held constant. While it was obviously incorrect to compare sub-classes of criminals with averages to which the sub-classes contributed, and while Goring made no attempt to dis-

¹⁶⁵The English convict. London: H. M. Stationery Office, 1913.

¹⁶⁶Goring's analysis of the methodological requirements of criminological research should be examined by all students in the field.

cover a possible differentiation with respect to anthropometric traits when taken in combination rather than singly, still any striking differentiation between the various groups would have been disclosed by the method he adopted. His results, then, indicate that criminals are not differentiable from non-criminals in terms of physical stigmata, as Lombroso maintained.¹⁶⁷

In regard to physique, Goring found no reliable difference between the various sub-classes of convicts and the entire class when age and social status were held constant. However, the group of convicts and each of the sub-groups, with the exception of the fraud offenders,¹⁶⁸ appeared to be inferior in physique to the general population, even when age and social status were held constant.¹⁶⁹ In investigating the connection between criminality and insanity or disease significant tetrachoric *r*'s were found only in the case of alcoholism (.391) epilepsy (.256), and venereal disease (.310). Even the first two correlations, however, were rendered more or less negligible when intelligence was held constant.

In the intelligence correlations the amount of feeble-mindedness in the criminal group was determined solely by diagnosis and that in the general population by more or less approximate estimates. These criteria are obviously unreliable.¹⁷⁰ Goring's correlation of $+.66$ between feeble-mindedness and criminality, upon which he placed great emphasis is therefore not to be taken too seriously. His investigation of the relationship between various sociological factors and criminality was rather superficial. It

¹⁶⁷Lombroso estimated that some 40% of criminals were classifiable as born criminals who were differentiated from the normal by various anthropometric traits. The presence of such a group should have produced greater differentiation than was obtained by Goring.

¹⁶⁸The fraud offenders, incidentally, appear to be, unlike the other groups, a representative sampling of the general population, being characterized by low alcoholism and higher intelligence and education, their marriage rates and occupational distribution are closer to those of the general population, etc. Other important distinctions are that fraud offenders tend to be convicted for solitary offenses and commence their criminal career at a relatively late age (sex offenders, *per contra*, starting early).

¹⁶⁹However, Goring argued that defective physique, as well as defective intelligence, rendered it more likely that an offender would be apprehended and convicted.

¹⁷⁰See pp. 101-102, *supra*

was only incidentally involved in his inquiry, and he relied upon official records for his data. He found no significant correlations, except possibly for occupational status. He also found tetra-choric r 's ranging between .4 and .7 (based on varying estimates of criminality in the general population) between the criminality of fathers and that of their male offspring, and between the criminality of mothers and that of their male offspring. For a number of reasons he adopted .6 as an index of criminal parental inheritance, which was slightly higher than the indices of the inheritance of other factors, such as insane diathesis and tuberculosis, which he and other investigators had obtained. His correlations between criminality and the tendency of brothers to be sent to prison ranged from .32 to .58 (most probable value .45); and the marital correlation for crime was .64. Goring assumed that inheritance accounted for the former and mating for the latter. He was of the opinion that the influence of criminal contagion was very slight in producing these results. Coupling this with his finding that the criminal was inferior to the non-criminal both in physique and intelligence, both of which he believed to be inheritable qualities, he reached the ultimate conclusion that the criminal was characterized by a general hereditary inferiority. This conclusion has been much criticized, and it was undoubtedly based on faulty evidence. Goring's work is nevertheless valuable as an exhibition of better statistical work¹⁷¹ and because of the anthropometric data which it yielded.¹⁷²

¹⁷¹For a critical discussion of Goring, see G Lombroso-Ferrero, The results of an official investigation made in England by Dr. Goring to test the Lombroso theory, *J. Crim. Law and Criminol.* 1914, 5, 207-223; E. Ferri, The present movement in criminal anthropology apropos of a biological investigation in the English prisons. *Ibid.*, 224-227; W. A. White, Method and motive from the psychiatric viewpoint. *Ibid.*, 348-352; H. D. Newkirk, The sociologic problem. *Ibid.*, 353-357, P. E. Bowers, Criminal anthropology. *Ibid.*, 358-363. See also M. P. Parmelee, *Criminology*. New York: The Macmillan Co., 1926; and F. Boas, *Anthropology and modern life*. New York. W. W. Norton, revised edition, 1932.

¹⁷²For instance, in measuring the extent of the relationship between the presence of a character in a criminal and the type of crime the anatomical characteristics were divided into four groups based on the character of the measurement made. Roughly corresponding to the degree to which the personal equation was involved, in some cases age was held constant by the use of regression formulas, in others, age and stature, in still others, stature and intelligence. For a fourth group of factors where there was no ground for the assumption of a graduated anatomical scale, the correla-

(t) Another of the more elaborate studies is that of D. Lund.¹⁷⁸ His findings are based upon a study of seven groups: (1) A group of 175 institutionalized delinquent boys for whom he had data derived from psychological tests, psychiatric examinations, interviews, and special inquiries made in the places of residence of those with whom the delinquents had come in contact before commitment; (2) A group of 445 institutionalized delinquent boys on whom the data were not quite as complete although of the same general type; (3) A group of 743 delinquent boys (which included group 1) on whom data had been secured for a few factors; (4) A group of 106 institutionalized delinquent girls on whom the same data had been accumulated as in the case of group 1. As control groups, Lund used (5) 709 normal boys, and (6) 106 normal girls, for whom he obtained a variety of more or less comparable data; and (7) also the siblings of his delinquent groups on whom he had data derived from the case histories of the delinquents. Groups 5 and 6 were roughly equated with the delinquent groups for age and place of origin.

Lund's findings are too numerous to report in any detail. We give a few of his more interesting differences. He found that the illegitimacy rate was 23.7% for the delinquents and 11.3% for the non-delinquents. 33.2% of the delinquents and 3.4% of the non-delinquents had immoral parents; 15.1% of the delinquents and 3.8% of the non-delinquents were orphans; 46.7% of the delinquents and 26.5% of the non-delinquents had lost one parent; 36% of the delinquents as compared with 8.1% of the non-delinquents had alcoholic fathers; 6.4% of the delinquents and .4% of the non-delinquents had alcoholic mothers; 34.1% of the delinquents and 71.6% of the non-delinquents were from economically well-situated families. One or both parents of 11% of the delinquents and of 1% of the non-delinquents had criminal

tion ratio method was deserted and the coefficient of contingency employed. Both correlation ratios (n) and the coefficients of contingency (C_2) are always positive, unlike the Pearson r ; their average is not 0 but a small positive number and hence a value of 1 means less when obtained for n and C_2 than for r .

¹⁷⁸Über die ursachen der jugendasozialität. Upsala: Almqvist & Wiksells, 1918.

records. One or both parents of 21.1% of the delinquents and of 5.6% of the non-delinquents were physically abnormal. 24.4% of the delinquents but only 10.2% of the non-delinquents were of retarded intelligence.

On the basis of a study of the case histories of his first group of 175 delinquents, Lund estimated that in 13.71% of the cases delinquency was to be attributed largely to heredity; in 9.7%, primarily to heredity and secondarily to environment; in 50.28%, largely to environment; in 15.43%, mostly to environment and subsidiarily to heredity; and that in 10.86% of the cases heredity and environment appeared to be of about equal influence.

Lund also computed several tetrachoric correlations for a group of 3,317 composed of delinquents and their siblings. He found that the coefficient of correlation between psychic subnormality of the parents and psychic subnormality of the children was $.75 \pm .02$. The coefficient between alcoholism of the parents and delinquency of the children was $.13 \pm .02$. The coefficient between criminality of the parents and delinquency of the children was $.34 \pm .02$.

Lund's study resulted in an enormous amount of data, which clearly suffer from the lack of adequate statistical treatment, since they are mainly in the form of unorganized percentage comparisons. The method of percentage comparisons is a clumsy method for dealing with a large number of variables, and it tends to give an exaggerated impression of relationships, especially among small groups. Lund's data are of undetermined, and probably of low, reliability because of his application of percentage comparisons to small groups. To some extent he also employed classificatory categories that were not strictly defined. His control groups were not selected with sufficient care to make it possible to determine the precise nature or the exact extent of the factors controlled. From the point of view of statistical technique Lund's work, therefore, is decidedly inferior to the studies of Goring, and to those of Burt and Slawson, which we are about to examine. It is interesting chiefly because of the wide range of factors which Lund attempted to take into account.

(u) C. Burt¹⁷⁴ also undertook an elaborate study of the causes of delinquency. He used various mental, scholastic, and physical measurements, physical examinations and psychiatric diagnoses, and in some instances he attempted a brief psychoanalysis of his cases. He studied 197 delinquents between the ages of 5 and 17, of whom 123 were boys and 74 were girls. He compared this group in every detail, except psychoanalytically, with 100 non-delinquent boys and 50 non-delinquent girls who were paired with the delinquent group for age, schooling, neighborhood and socio-economic status. In some instances he used a larger control group of 200 non-delinquent boys and 200 non-delinquent girls of the same age and social class as the delinquent group. This larger group included the smaller control group.

Burt first enumerated a schedule of approximately 150 possible factors which he then classified under four heads: hereditary conditions, environmental conditions, physical conditions and psychological conditions. These factors were further classified as major or minor according to the way in which they appeared to be related to delinquency in the individual cases. This enabled him to compare the frequency with which any given factor appeared causally as a more important or as a less important factor. His data are summarized by percentages of the appearance of each factor for each of the groups studied. His statistical generalizations are in the form of coefficients of association between his general classes of factors and delinquency.

The coefficient of association between the class of hereditary conditions as a whole and delinquency was $+.25$ when those conditions were determined by ratings of relatives generally, and $+.32$ when they were determined by ratings of parents only. The coefficient expressing relationship between environmental conditions and delinquency was $+.32$, between physical conditions and delinquency, $+.16$, and between psychological conditions and delinquency, $+.31$. These coefficients are derived from tables in which Burt compares the delinquent with the non-delinquent group with respect to a long list of specific factors. Since we

¹⁷⁴The causal factors of juvenile crime. *Brit. J. Med. Psychol.*, 1923, 3, 1-33.

cannot reproduce those tables or adequately summarize the large array of data which they contain, we shall quote Burt's conclusions instead.¹⁷⁵

"(2) The tables show a lengthy list of contributory causes. Delinquency in the young seems assignable generally to a wide variety, and usually to a plurality of converging factors; so that the juvenile criminal is far from constituting a homogeneous psychological class.

"(3) To attribute crime in general to either a predominantly hereditary or a predominantly environmental origin appears impossible; in one individual the former type of factor may be paramount; in another, the latter; while with a large assortment of cases, both seem, on an average and in the long run, to be of almost equal weight.

"(4) Heredity appears to operate, not directly through the transmission of a criminal disposition as such, but rather indirectly, through such congenital conditions as dullness, deficiency, temperamental instability or the excessive development of some single primitive instinct.

"(5) Of environmental factors those centering in the moral character of the delinquent's home, and, most of all, in his personal relations with his parents, are of the greatest influence.

"(6) Psychological factors, whether due to heredity or to environment, are supreme both in number and strength over all the rest. Emotional conditions are more significant than intellectual; while psychoanalytical complexes provide everywhere a ready mechanism for the direction of overpowering instincts and of repressed emotionality into open acts of crime."

Burt was able to study so elaborate a schedule of factors by employing a wide range of techniques. His attempt to quantify data obtained by the case history method is of particular interest. Furthermore, his choice of control groups was unusually careful.

¹⁷⁵*Op. cit.*, p. 32. We have omitted (1).

Instead of using published norms, as so many investigators have done, Burt selected his controls and examined them directly. His work, however, is not without its methodological defects. Many of his classifications are probably of low reliability. This has diminished the accuracy not only of his percentage determinations but also of his correlations, since the degree of correlation was undoubtedly influenced by the varying reliability of the factors correlated. Furthermore, his correlations between classes of factors and delinquency do not show the precise relationships which obtain, since the interrelationship of the various classes of factors was undetermined. The most they do is to suggest that certain of the factors studied are either related to delinquency or associated with other factors which are so related, but they do not indicate which. The populations with which Burt worked included too few cases for the study of so large a number of factors. Finally, there is some doubt as to the propriety of the use which Burt made of the coefficient of association.¹⁷⁶

(v) John Slawson¹⁷⁷ studied 1,543 delinquent boys from the New York House of Refuge, the State Agricultural and Industrial School, the Hawthorne School and the Berkshire Industrial Farm. He used as his controls either published norms for the tests and questionnaires which he administered, or various groups of New York public school children comparable for nationality, age or socio-economic status. Most of his work was executed by means of the test method, various forms of which he utilized in the study of a wide range of different factors, such as intelligence, psycho-neurotic traits, physical traits and environmental conditions.

Tested for their verbal abstract intelligence, only 17.7% of 1,445 delinquents reached or exceeded the norms for a comparable group of unselected public school children. 13.4% of the delinquents were normally deficient and 16.4%, of borderline intelligence. This low percentage (as compared with the usual estimates of 25%-50%) Slawson explains by the fact that he took

¹⁷⁶T. L. Kelley, *Statistical method*. New York: The Macmillan Co., 1923.

¹⁷⁷The delinquent boy. Boston: Badger, 1926.

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14 years as the adult level instead of 16 years¹⁷⁸ and also by the fact that his cases included a considerable group of Hebrews who tended to raise the group average. Using the Terman group as a control, he correlated mental deficiency with delinquency for the adult white population over 15 at the New York House of Refuge and obtained a coefficient of $+ .62$; using the army draft as his control, he obtained a coefficient of $+ .12$. The difference between these two coefficients is probably to be accounted for by the different socio-economic status of the two control groups. Slawson also found that the correlation between intelligence and extent of delinquency, as measured by the number of times arrested and the seriousness of the offense charged, was negligible.

Tested for their non-verbal concrete intelligence by the Thorndike non-verbal test,¹⁷⁹ 32.6% of Slawson's delinquent group reached or exceeded the Thorndike norms. Again, it may be questioned if the control group was strictly appropriate. Tested for their mechanical aptitude by the Stenquist test, the delinquent group was found to be approximately normal, and relatively superior to their rating on abstract and concrete intelligence. Correlations of both these criteria with delinquency were negligible.

Slawson used the Woodworth-Matthews inventory to detect the presence of psycho-neurotic responses. 15.6% of the delinquent group in three of the institutions reached or exceeded the median score of unselected school children. Using the school children as a control, Slawson found the colligation coefficient between poorer than median performance on this questionnaire and delinquency to be $+ .40$. There is some doubt as to the competency of this questionnaire, since it contains no questions dealing with sex reactions and emphasizes the submissive as opposed to the aggressive traits.

¹⁷⁸See p. 113, *supra*.

¹⁷⁹This test is valuable as an indicator of the intelligence of those boys who, because of the influence of race and nationality, might not do themselves full justice on a language performance test. This was evident for the Hebrew and Italian boys who did better on the Thorndike test than on the National Intelligence Test. On the other hand, it usually tends to a bad distribution in the lower ranges, since its presentation in pantomimic form means that a subject may miss the point of a whole section of the test.

Physical measurements were also taken. In weight, the delinquent group tended to be slightly superior to norms of comparable social status (the Burk norms as compared to the Smedley norms). As for height the younger delinquents were normal as compared with the Boas and Smedley norms and the older delinquents tended to be slightly inferior. However, comparisons of the Hawthorne School (exclusively composed of Hebrews) with the Boas norms for Hebrews tend to indicate that nationality plays a great part in determining height. No relationship was found between height and weight and the degree of delinquency.

In addition, Slawson studied a number of environmental factors. Broken homes were present in 45.27% of 1,649 cases as compared with 19.3% for 3,198 New York public school children (and 30.33% for a controlled group of those children). Using this latter group as a control the coefficient of colligation between broken homes and delinquency was found to be $+.30$. When another control group was selected with a lower social and economic status, this coefficient was reduced to $+.16$. No noteworthy relationship appeared between broken homes and the extent of delinquency. The correlation of delinquency with an institutional childhood, e. g. orphan asylums, was $+.49$; with the presence of step-parents, $+.32$. The number of mothers gainfully employed seemed to have practically no correlation with delinquency. There was apparent, however, a slight tendency for the delinquents to come from larger families and families where the father had a low occupational status, although no appreciable correlation was found for the extent or severity of delinquency. The relationships between race and delinquency and nationality and delinquency were also negligible.

Slawson's work is commendable both for its thoroughness and its statistical expertness, as manifested particularly in the use of more or less specific factors and the frequent intercorrelations between the various test scores and between test scores and other characteristics of his groups. Its chief defect lies in the incomparability of some of the control groups with the test groups, although he frequently sought to obviate this by obtaining con-

clusions for the most comparable of the institutions he studied. To obtain results which were more than suggestive, the test and the control groups should have been more carefully matched. In this respect Burt's work is superior. Slawson's scale for extent of delinquency (based on a dollar-day sentence scheme) was an ingenious device, valuable in that it permitted the use of accurate measures of correlation. His coefficients, however, lack significance because of the failure to control interrelated variables. The only factor which was controlled statistically was age. The negligible coefficients which he obtained in many instances may have been due either to the absence of any relationship or to the masking of relationship by uncontrolled variables.

Section 3. Critical Summary.

We have now completed our survey of researches in causation. In reporting these researches we have usually commented on the validity and significance of the findings and have pointed out defects in method. In this section we shall attempt a comprehensive critical appraisal of this body of investigation, an evaluation of it in the light of standards and criteria which we have previously explained. This will enable us here to summarize the methodological criticisms which have been made disconnectedly at various points in the foregoing survey.

Our criticisms of the work are based, first, upon the conception of empirical science and scientific method stated in Chapter IV; and, second, upon the analysis of the problems and methods of the research, which we presented in the first section of this chapter. We shall confine our specific criticisms, however, to a discussion of the failure of these investigations to satisfy the indispensable requirements of method and procedure entailed by the nature of the problems under investigation. We shall not criticize them for failing to solve etiological problems, for failing to give us knowledge of the causes of criminal behavior. An examination of the researches shows that they were not devised to answer questions of etiology; the methods employed and the nature of the problems are hopelessly inadequate from the point

of view of etiology. We have, however, been able to formulate a number of specific problems to which these researches, by reason of their plan and method, can *possibly* be relevant. These specific problems of group differentiation have, of course, some relation to problems of etiology, but they must not be confused or identified with the latter.

In short, we shall not reiterate here what was pointed out in Chapter IV, that there are no scientific propositions in criminology because of the raw empiricism and the confusion of subject matters which currently prevail in psychology and sociology. Instead, we shall inquire whether this body of investigations affords a definite or clearly valid answer to any of the following specific questions: (1) Can criminals be differentiated from non-criminals in terms of any set of factors? If so, what are the differentiating factors? (2) Can any type of criminal be differentiated from any other type of criminal in terms of some set of factors? If so, what are the factors? (3) Can any type of criminal be differentiated from non-criminals in terms of some set of factors? If so, what are the factors? (4) Can any type of non-criminal be differentiated from criminals in terms of some set of factors? If so, what are the factors? (5) Can any type of non-criminal be differentiated from any type of criminal in terms of some set of factors? If so, what are the factors?

Our critical appraisal of the researches reported in the preceding section can be succinctly summarized in the following statement: *These researches do not afford a single definite and clearly valid answer to any of the foregoing questions.* We do not know whether criminals can or cannot be differentiated from non-criminals in terms of any set of factors. We do not know whether classes of individuals whose offenses are different in terms of the criminal law can be differentiated from one another. We are similarly ignorant with respect to each of the other questions. Unless it is unfair to say that it was the purpose of the researches summarized to answer questions of this sort, it cannot be thought an unjust evaluation of them to say that they have failed utterly to accomplish the purpose for which they were undertaken. All

of the investigations which have been conducted not only have not advanced our knowledge of the causes of criminal behavior, but, what is worse, have not yielded conclusions relevant to the only specific problems by which they can conceivably have been directed. The knowledge which has been accumulated by so much industry and effort not only lacks etiological significance but is inconclusive in its own terms. It can have the status only of descriptive knowledge, for the most part restricted in its reference to the particular aggregates of individuals which criminologists have at one time or another studied. We have previously discussed the limited value of descriptive knowledge. It can be added here that these researches have the further value of a bad example. They illustrate errors to be avoided in the future, and in this way they provide useful background for the formulation and execution of future research projects. They have given investigators training in the use of method and have revealed some of the defects and pitfalls to be avoided in the future employment of these techniques.

In order to profit from the bad example which a failure of this sort offers, we must analyze in some detail the factors which are responsible for the failure. We can enumerate the different defects in the methodology of these investigations under three heads: (1) the validity of observational data; (2) the statistical significance of observational data and the validity of statistical products; (3) the significance of the data with respect to the problems of the research. The general conditions of the validity and significance of data have already been discussed.¹⁸⁰ We shall, therefore, confine ourselves here to an enumeration of specific failures to satisfy these conditions.

1. *The Validity of Observations.*

A. Where researches have employed the test method, they have in almost all cases done so without determining the validity of the data derivable by means of the test instrument. Many different tests have been used, but only in the cases of a few intel-

¹⁸⁰See p. 100, ff., *supra*.

ligence tests has the test instrument itself been tested. Data which are gained by means of a test instrument, the accuracy and reliability of which is not known, must have indeterminate validity. For the purposes of science, data which are indeterminate are as worthless as data known to be false.

B. Where researches have employed the case history method and have necessarily entailed direct observation of the items in case histories, the items have seldom been defined. These observations, furthermore, have been made the basis for the psychiatric diagnosis and classification of individuals and for the sociological classification and comparison of environments, but in no case has any effort been made to test, first, the reliability and accuracy of the observations, and, second, the reliability and accuracy of the diagnoses and classifications. There is some indication of the unreliability of both observations and diagnoses in the disagreement of the findings of various comparable researches. In any event, the data of observation here have an indeterminate validity in the sense indicated above.

C. In the use of the case history method for the purpose of making diagnoses or classifications, it is necessary to distinguish between what is observed and the inferences which follow from these observations. The distinction is important because the conditions of the validity of observation are different from the conditions of the validity of the products of inference. It is, therefore, a serious defect in almost all of the work which has employed the case history method that this distinction has not been made. Much of the unreliability that is discernible in the disagreement of the findings may therefore be due not to the invalidity of the observational data but to divergences in the inferential processes of diagnosis and classification. On the other hand, the lack of definition of items to be observed suggests that the observational data themselves are probably invalid.

D. We conclude at this point, therefore, that most of the data of observation are worthless because their validity is indeterminate; some of the data of observation are now known to be

invalid and are therefore worthless; in a few cases the data are properly validated. In addition to the fact that data which are invalid are useless as a basis for further scientific work, the methodological inadequacy with respect to the conditions of observation is such as to make the repetition of observations for the purpose of checking their accuracy and reliability almost impossible. In order that one investigation may repeat and check the work of another, it is necessary for the conditions of observation to be uniform. The inconsistent findings which have been reported cannot, therefore, be interpreted to mean that later investigations have checked and corrected earlier investigations, but rather that the investigations have been executed under disparate and incomparable conditions.

2. The Validity of Statistical Interpretations of the Data of Observation.

A. Invalid data or data lacking determinate validity should not be employed as a basis for statistical inference.¹⁸¹ In the further discussion of the conditions prerequisite to statistical inference we shall assume that the data are valid products of observation.

B. With a few exceptions, the findings of the researches which have been surveyed are expressed either in terms of averages or percentages. An average may, of course, be nothing more than a statistical description, that is, an index which can be used to summarize a collection of numbers in a certain way. An average computed in this way states knowledge about a particular aggregate of individuals, which is a sampling from a universe of individuals. The sampling may be too small; the sampling may not be a fair homogeneous selection.

It is always necessary therefore to determine the limits within which the true average, expressing knowledge about the universe from which the sampling was taken, will most probably lie. This determination is expressed by the standard error of the average.

¹⁸¹This does not mean that statistical processes cannot be used to detect the invalidity of data of observation.

The standard error depends upon the number of cases used and the variability of the distribution. It can be interpreted as a statistical constant *only if* the sampling can be assumed, on other grounds already known, to be fair, random and homogeneous. It is a measure *only* of the margin of error in an average, which can be considered due to fluctuations in the sampling. It does not measure the fairness of the sampling. Whereas the obtained average is merely a statistical description, the true average is a product of statistical inference.¹⁸²

In almost all of the work under discussion, obtained averages or percentages were employed *as if they were true averages*. This indicates the worst kind of statistical incompetence. It is a most elementary rule of statistical practice that averages should always be accompanied by standard deviations and measures of frequency, from which it is readily apparent whether the standard error is so large as to make the average unusable. In only a few cases did investigators qualify the obtained average by the appropriate statistical indices. There is no evidence, moreover, that any of the investigators examined and tested their samplings for fairness and homogeneity. Obtained averages cannot be used for statistical inference unless these criteria are independently satisfied.

C. Much of the research depends upon the comparison of averages or percentages. The significance of the differences derived from such comparison is limited by the fact that these differences are unaccompanied by any measure of the reliability of the differences. A difference between averages and percentages, unaccompanied by the probable error of the difference, is of little significance; yet that is precisely the way in which the research findings are presented. It is also important, when considering two averages for the purpose of comparing and differentiating groups, to determine the standard deviations or variabilities needed to qualify the obtained averages. Two distributions may

¹⁸²For an adequate discussion of these matters, see G. Udny Yule, *op. cit.*, Chs. XIII and XIV, and F. C. Mills, *op. cit.*, Ch. XVI, dealing with statistical induction and the problem of sampling.

be similar with respect to their averages but have entirely different ranges of variability. The reverse is also possible, so that one may have differing averages but considerable overlapping in the distributions of the groups being compared.

D. In a few cases¹⁸³ the investigators attempted to employ a slightly more complicated statistical device than an average or percentage, such as a measure of correlation. Correlations, like averages, are merely statistical descriptions, referring only to specific samplings unless they are properly corrected and qualified. The few investigators who have employed methods of correlation have not performed these operations in a manner to indicate the significance of the correlation. Few if any of these investigators have recognized the technical limitations of the coefficient of correlation; they have not always realized, for instance, that the correlation technique is applicable only to non-selected distributions, and that in dealing with discontinuous distributions, it is necessary to consider special criteria of the applicability of correlation formulae.¹⁸⁴

The statistical indices which have been employed have been tetrachoric *r*'s, coefficients of association or coefficients of contingency. These coefficients can be interpreted *only* in terms of some prior analysis of the data that is being operated upon.¹⁸⁵ Such interpretations have not been given; nor could they be given in the absence of theory or analysis in the field of criminology.

¹⁸³See the work of D S Thomas, Goring, Burt, Lund and Slawson, discussed above.

¹⁸⁴See T L Kelley, *op cit*, Ch X

¹⁸⁵We have already pointed out that coefficients of correlation are inferior to regression equations as measures of functional relationship. But neither of these measures can be significantly interpreted in the absence of prior independent knowledge. J M. Keynes has clearly formulated the conditions of the inductive use of indices of correlation. We quote two statements from Chapter XXXIII of his *Treatise on Probability* "Sensible investigators only employ the correlation coefficient to test or to confirm conclusions at which they have arrived on other grounds", and "If we have a considerable body of preexisting knowledge relevant to the particular inquiry, the calculation of a small number of correlation coefficients may be crucial but otherwise we must proceed as in the case of frequency coefficients; that is to say, we must have before us, in order to find a satisfactory argument, many sets of observations of which the correlation coefficients display a significant stability in the midst of variation in the non-essential class characteristics of the different sets of observations."

E. In conclusion at this point we can say that criminological research exhibits a naïveté and incompetence in the use of statistics so great that almost all of the statistical products, even in the simplest cases, are invalid or insignificant except as statistical descriptions. In those few cases in which coefficients of association or of contingency were employed, the results of correlation were further rendered insignificant by inadequacy in the employment of control or comparison groups, and by ill-defined units of measurement. Just as an average depends for its significance upon the nature of the sampling, so an index of correlation depends for its significance upon the comparability of the assemblages correlated.

3. The Conclusiveness of the Researches With Respect to Their Problems.

A. In order to discuss the ability of findings to yield conclusions relevant to the problems of research, it is necessary for us to assume that the data are valid observationally and that they have been properly interpreted by statistical means. If the data of observation are not valid and if statistical inferences have not been correctly made, it is, of course, supererogatory to ask whether the data have yielded relevant conclusions.

B. All of the problems by which these researches have been directed involve the differentiation of groups of individuals. The employment of control or comparison groups is, therefore, indispensable to the solution of these problems. The significance of the percentages, averages, coefficients of association, etc., derived from the observation of groups of individuals, depends upon the comparability of the groups employed. It is, therefore, a serious criticism of these researches that almost all of the early investigations failed completely to use control or comparison groups. The data of such researches are completely insignificant and inconclusive with respect to the problems of differentiation. But even the later and better investigations, which recognized the need of control and comparison groups, for the most part fill this

need inadequately. The groups selected are usually not comparable.

C. We must, therefore, point out that the findings which have been reported are insignificant not only statistically but also in terms of their inability to yield conclusions relevant to the problems of research.

To the foregoing criticisms which explain why these researches would be inconclusive, even if the data were valid, we must now add a final criticism of another sort. We have seen that we are not able as a result of criminological investigation to solve the problems of group differentiation. Any investigator who would attempt to derive an answer to these questions from the findings of any research which has so far been done, would be clearly in error. How much more egregious than that is the error of those investigators who have attempted to draw etiological conclusions from these findings.

Even if we knew that criminals could be differentiated from non-criminals in terms of some set of definite factors, we would not know the etiology of criminal behavior. To solve the etiological problem, not only must factors be distinguished as dependent and independent variables, but we must have knowledge of the interrelation of the variables with each other. We must be able to isolate and control sub-sets of variables within the total set of variables. We must know whether or not a given set of variables exhausts the field of relevant factors.

In short, in the absence of a theory or analysis, etiological problems cannot be formulated, and hence research cannot be directed toward their solution. Statistical processes by themselves cannot perform the service which is the rôle of theory and analysis. Correlations are not themselves significant but must be interpreted, and their interpretation cannot be accomplished in the absence of theory. Theory is even needed in order to determine the applicability of statistical techniques to the data.¹⁸⁰

¹⁸⁰This point is discussed by D. S. Thomas in *Statistics in social research*. *Am. J. Sociol.*, 1929, 35, 1-17.

The absurdity of any attempt to draw etiological conclusions from the findings of criminological research, is so patent as not to warrant further discussion. Yet the number of instances in which this has been attempted is amazingly large. It is, furthermore, a striking commentary that these attempts have been made by the less rather than by the more competent investigators. The best pieces of research have been done by men who have more or less explicitly recognized the inconclusiveness of their findings with respect to their own research problems, and the entire inadequacy of their research with respect to problems of etiology. On the other hand, investigators who have done trivial and glaringly defective research have been ready to draw easy conclusions therefrom and have had no hesitancy in voicing what can be treated only as the shallowest opinions about the causes of crime. In addition to all of the methodological defects which have been enumerated, these investigators have failed to recognize that both human and environmental variables are necessarily involved in the etiology of human behavior.¹⁸⁷ That failure alone would be sufficient to render fallacious any conclusion about the causes of crime, which they have drawn from data which has no etiological significance. The assurance with which criminologists have advanced opinions regarding the causes of crime is in striking contrast to the worthlessness of the data upon which those opinions are based.¹⁸⁸

¹⁸⁷This means not only that a plurality of factors will be discovered in the causal background but that among them will be factors of both kinds.

¹⁸⁸It will be recalled that by an opinion we mean the interpretation of descriptive knowledge in terms of individual as opposed to common experience. See pp 58-59, *supra*

Chapter VI

RESEARCHES IN TREATMENT

Section 1. Preliminary Discussion: Problems and Methods.

As we have already pointed out, the separation of researches in treatment from investigations of the causes of criminal behavior is arbitrary and is justified only by convenience. The study of the treatment of offenders is a special case of the study of the causes of criminal behavior. It is distinguished as a separate case by the fact that in all the researches which we shall survey in this chapter, some mode or aspect of the treatment process is considered as a factor in the behavior of either potential or actual criminals.

The treatment process is merely one of the environmental factors, which may or may not be found to have etiological significance.

The treatment process can, of course, be studied without any relation to the behavior of potential and actual criminals, but such studies obviously would have no relation to the general problem of causation. They are therefore discussed elsewhere.¹ It must also be pointed out that we are here concerned only with the treatment of actual offenders, by which we mean post-conviction as opposed to pre-conviction treatment.² Pre-conviction treatment, that is, the treatment of individuals suspected or accused of crime, may be studied as a factor in relation to criminal behavior in the same way as post-conviction treatment, but no studies of this sort have yet been made. Those which have been made are studies of the pre-conviction process in relation to ends of criminal justice other than the reformation of actual offenders

¹See Chapter IX

²See pp 35-36, *supra*.

and the deterrence of potential offenders.³ Since we are concerned in this chapter with an examination and criticism of completed researches and since those researches deal exclusively with post-conviction treatment, we shall use the word treatment throughout this chapter to mean the treatment of actual offenders.

The treatment process can be considered as an environmental factor in two distinct ways. In the first place, the treatment process consists of different modes of treatment, such as whipping, execution, deportation, imprisonment, probation or parole. Each of these modes may furthermore have many different varieties; that is, there may be many different kinds of institutional practices, all of which can be called imprisonment; but whether we deal with the mode or some variety of it, treatment in this first sense always means a mode of treatment prescribed by the treatment content of the criminal law.

In the second place, the treatment process consists in all of the specific acts of officials in the application of recognized modes of treatment to particular offenders who come within their range of official behavior. The same mode or the same variety of a mode of treatment may be executed differently by different officials at different times and places.

It is important, therefore, in examining the researches in this field that we note in which of these two quite distinct senses treatment is being studied. Almost all of the researches, as we shall see, employ some designated mode of treatment as the factor to investigate. Few, if any of them, distinguish between varieties of the same mode of treatment. None of them study the treatment process as the behavior of officials. What the treatment process is in any given study should, of course, be precisely defined. It is one of the variables and unless it is precisely defined the data of research cannot be valid. We shall return to this point later.

³See Chapter IX. There have been descriptive studies of various instrumentalities employed in pre-conviction treatment, on the basis of which investigators have formed common sense opinions regarding the influence of various aspects of pre-conviction treatment upon the behavior of those who are subjected to it. See, for example, J. F. Fishman, *Crucibles of crime*. New York: Cosmopolis Press, 1923.

Another distinction must be made between the study of the treatment process in relation to potential offenders and the study of the treatment process in relation to actual offenders. The treatment process can be an environmental factor in the biography of potential offenders only to the extent that they learn in some way, either by contact or by hearsay, of the treatment process. This is a very indefinite answer, but it is the best that can be given in the present state of our knowledge. It shows the absurdity of studies of the treatment process as a factor in the behavior of potential criminals. Not only are we unable to define the precise status of the treatment process as a factor in the behavior of potential criminals but, as our survey of researches in causation has already shown, we do not know whether the class of potential offenders is homogeneous or heterogeneous with respect to other relevant factors; we do not know what these other relevant factors are; and we do not know whether the class of potential offenders can be differentiated from the class of actual offenders in terms of any set of factors. We must, therefore, recognize that in the present state of our knowledge it is impossible even to formulate in the crudest way the problem of the relation of the treatment process to the behavior of potential offenders. We shall subsequently discuss the precise nature of those studies which are supposed to be directed by this problem, which cannot even be stated.

The treatment process can be studied as an environmental factor in the biographies of actual offenders. Researches of this sort are supposed to be interested in the causes of recidivism or the differential effects of different modes of treatment upon the offenders to whom they are applied. The problem of the causes of recidivism differs from the problem of the causes of the criminal behavior of first offenders primarily with respect to the involvement of the treatment process as a factor; but that does not mean that the treatment process is the only factor to be studied. It is merely one of a large number of environmental and human factors in terms of which it may or may not be possible to differentiate recidivists from non-recidivists. The prob-

lem of differentiating recidivists from non-recidivists is, as we shall see, strictly analogous to the problem of differentiating criminals from non-criminals.

It was shown in the previous chapter that researches supposed to be concerned with the causes of crime could not be so considered because etiological problems cannot at present be formulated. The only questions which could be framed in order to interpret the researches were questions about group differences. So here, we must similarly formulate the problems of the researches we are about to survey. They are not the problems which the investigators themselves supposed to be their objectives, that is, the deterrent and reformative effects of the treatment of offenders.

Before attempting to state the problems of research in this field, it is advisable to point out that the knowledge yielded by these researches is not scientific. It is descriptive knowledge, and consists either in non-quantitative or quantitative descriptions. The non-quantitative descriptive knowledge reports the characteristics and elements of various modes of treatment and the subsequent behavior of offenders to whom they have been applied. We have such descriptive knowledge chiefly of the different modes of treatment, but not of all their many varieties. We have little descriptive knowledge of the behavior of officials. We shall not survey the mass of non-quantitative descriptive knowledge of the treatment process for the same reason that we did not survey non-quantitative descriptive knowledge in the previous chapter. The chief value of this body of knowledge is, first, that it indicates differences among varieties of the same mode of treatment, and, second, that it affords materials which can be used in the definition of the treatment variable in quantitative research. That the treatment variable is not defined in most of the quantitative research which has been done is partly due to the lack of sufficient knowledge of the varieties of modes of treatment; but it is also due to the failure of investigators to appreciate the necessity of analyzing precisely the nature of the mode of treatment being employed as a factor in their research.

The quantitative knowledge which we shall survey consists in measurements of what are supposed to be effects of the treatment process or in measurements of various factors which are supposed to be related to the treatment process and its effects. By calling this quantitative knowledge descriptive, we mean that it lacks one or more of the indispensable traits of scientific knowledge. It does not consist in general propositions which formulate correlations of variables; when at its best, this knowledge takes the form of statistical indices of correlation, but these indices are no more than statistical descriptions.

We are now prepared to formulate the problems in terms of which the research data can be interpreted. It is important to distinguish the problems we shall formulate from the problems which are supposed to be the objectives of research in this field. The latter can be stated in two ways: (1) What are the deterrent effects of the treatment process? (2) What are the reformative effects of the treatment process? By deterrent effects is meant the causal influence of the modes and varieties of the treatment process upon potential criminals; by reformative effects is meant the causal influence of the modes and varieties of the treatment process upon actual criminals. These two questions constitute an etiological problem. But it is a problem which we cannot formulate in such a way that researches can be directed by it, or that data of research can be interpreted by reference to it. As previously pointed out, no science of human behavior now exists, nor do the sciences of psychology and sociology upon which such a science depends now exist. It is impossible in the absence of any theory or analysis to formulate problems in the etiology of human behavior in such a way that they can be used in the direction and interpretation of investigations.

The previous chapter reveals that at present we have absolutely no knowledge of the causes of criminal behavior and that, furthermore, the researches which are supposed to investigate the causes of human behavior cannot be so construed. They must be considered as having been directed by such questions as can criminals be differentiated from non-criminals in terms of some

set of factors? We do not even possess knowledge which conclusively answers this type of question. This suffices to show that we cannot now investigate the deterrent or reformative effects of the treatment process. Such investigations would have to assume that criminals can be differentiated from non-criminals by reference to the treatment process alone or in conjunction with other factors. This assumption is unwarranted.

The most striking way in which it can be shown that researches in treatment have no significance with respect to the problems of deterrence and reformation, is by an enumeration of the questions which can be answered as a result of these researches. We can state five questions and in each case show that our ability to answer these questions does not in any way enable us to answer questions about the deterrent and reformative effects of treatment.

1. What is the crime rate or what are the rates for specific crimes in given communities, either contemporaneous with or subsequent to the application of a given mode of treatment? The awkwardness in the phrasing of this question is necessary to avoid asking what is the relation of given modes of treatment to general or specific crime rates? This question assumes that there is a relation and asks about the nature of the relation. But this assumption cannot be made. We do not at present know that there is any relation whatsoever between the volume of crime or of particular crimes and any particular mode of treatment.

The question we have formulated is the question which researches supposed to be interested in deterrence, are able to answer. However, to conclude from knowledge of this sort that a given mode of treatment either has or has not any deterrent effect upon potential criminals is to commit the almost inexcusable fallacy of *post hoc ergo propter hoc*. We shall see that the knowledge which answers this question is of dubious validity, in addition to having no etiological significance whatsoever.

2. What is the rate of recidivism for a group of individuals to whom a given mode of treatment has been applied? Most of

the researches which are supposed to be concerned with the reformative effects of modes of treatment do no more than answer this specific question. It is clear that, even were the knowledge which answers this question valid, it could not be used as a basis for any conclusion about the reformative effects of a mode of treatment. We do not know that there is any relation between recidivism and the treatment process. We do not know whether or not actual criminals can be differentiated into recidivists and non-recidivists by reference to any factor or group of factors. Our knowledge, therefore, of the rate of recidivism in a particular group of actual criminals treated in a certain way is totally insignificant at present. As quantitative knowledge it does not even have the generality possessed by statistical inferences; it is merely descriptive in the sense that its reference is entirely restricted to the groups of criminals studied by particular researches.

3. What are the comparative rates of recidivism for groups of criminals to whom different varieties of the same mode of treatment have been applied? Only a few studies have sought to answer this question. Furthermore, the only mode of treatment, varieties of which have thus been compared, is imprisonment. This question can be formulated in another way: Can different varieties of the same mode of treatment be differentiated by reference to rates of recidivism? Even if this latter question were answerable, the answer could not be interpreted to signify differences in the reformative effects of different varieties of the same mode of treatment, because rates of recidivism are not by themselves measures of the reformative effects of treatment unless it can be assumed that treatment is the only fact relating to recidivism. But this clearly cannot be assumed. Therefore, even valid answers to the question under consideration would have no etiological significance whatsoever. As we shall show, however, it is doubtful whether this question has been validly answered.

4. What are the comparative rates of recidivism for groups of individuals to whom different modes of treatment have been

applied? Only a few studies have attempted to answer this question, and they have been exclusively concerned with the comparison of imprisonment and probation. The analysis of this question is the same as that we have just given for the previous question. Even if we had knowledge which validly answered it, which, as we shall see, is questionable, such knowledge would tell us nothing about the comparative reformatory effects of different modes of treatment, because the rate of recidivism is not a measure of the reformatory effect of a mode of treatment. It can be added also that the quantitative knowledge which has been gathered in answers to questions 3 and 4 consists at best of statistical descriptions, as in the case of question 2.

5. Can a group of parolees be differentiated into sub-groups of successful and unsuccessful parolees by reference to some set of factors, of which some variety of imprisonment is only one? Studies which seek to answer this question are usually called researches in parole prediction, because if the question can be answered the answer can be used, it is thought, as a basis for predicting whether a given type of offender will or will not be successful on parole. Parole success means non-recidivism; parole failure, recidivism.

This fifth question can be seen to be strictly analogous to the questions which we formulated in our discussion of researches in causation. It constitutes a problem in the differentiation of groups by reference to factors whose relevance to the differentiation must be shown. Unless the precise nature of the relevance of varieties of imprisonment as a factor in the differentiation of successful from unsuccessful parolees can be determined, the answer to this question cannot be used as a basis for determining the reformatory effects of imprisonment. As we shall see, the studies which have been made attempt the differentiation of successful from unsuccessful parolees in terms of one or more factors. They also attempt, but do not succeed in stating the precise significance of the factor or group of factors associated with imprisonment. Therefore, this group of researches cannot be considered as contributing knowledge of the reformatory effects of

varieties of imprisonment. In addition, it is questionable whether the data which have been achieved have generality or whether their significance is strictly limited to the particular groups of parolees which have been studied.

It is in terms of these five questions and not in terms of the problems of deterrence and reformation that we shall estimate the significance of the data of research. Inspection of the researches will substantiate the statement that they afford absolutely no basis for any conclusion about either the deterrent or the reformative effects of modes and varieties of treatment.

The specific methods employed by investigations seeking to answer one or another of these five questions are the same as those employed in researches in causation, namely, the test method, the case history method and the census method. Almost all of the investigations, however, have used only the census method. In fact, it can be said that all researches which can be grouped by reference to questions 1, 2, 3 and 4 used only data achieved by the census method, both crime rates and rates of recidivism. It is only the group of researches interested in the differentiation of successful from unsuccessful parolees, which supplements census data by quantitative data obtained through the use of either the test or the case history method. The best researches in this field, as in the case of causation, combine all three methods of obtaining data.

In our survey of investigations of the treatment process, presented in the following section, we shall criticize the data with respect to their validity and significance; and in Section 3 of this chapter we shall make a comprehensive evaluation of the researches surveyed. It is advisable, therefore, to state briefly here the criteria upon which our criticisms and evaluation rest.

The conditions of validity of data of observation are the same here as in the studies surveyed in the previous chapter. The items of observation must be defined precisely; measuring instruments and human observers must be tested for their accuracy and reliability. But most of the data in this field of research are data gathered by the census method; and therefore the question of

the validity of the data becomes a question of the validity of the sources of the census data. Suffice it here to say that crime rates are notoriously inaccurate and unreliable.⁴ The accuracy and reliability of rates of recidivism are impeachable in the same sense.

The conditions underlying the statistical interpretation of data of research are also the same here as in causation. Obtained percentages and averages and coefficients of correlation are merely statistical descriptions unless they are qualified and corrected. It is highly questionable whether the data gathered in this field would permit processes of qualification and correction. It can be pointed out here that, with the exception of a few researches with respect to success or failure on parole, the only statistical indices employed are obtained averages and percentages. In those exceptional researches which use coefficients of correlation, the applicability of such statistical operations to the data must be examined.

Finally, there are the conditions underlying the significance of the data with respect to the problems of research. The first two problems require no analysis; they are simple questions which the researches either do or do not answer. But the third and fourth problems require that investigators employ comparable groups in order to obtain data which will be significant. In order to compare different varieties of the same mode of treatment or different modes of treatment with respect to rates of recidivism, it is necessary that the different groups of offenders be comparable in the sense that they be homogeneous with respect to all factors other than the treatment factor. Furthermore, unless the treatment factor is precisely defined, it will be impossible to repeat the investigation with other groups of offenders at other times; and the data can therefore have the status only of statistical descriptions.

In order to achieve data which will be relevant in the solution of the fifth problem, properly selected control groups must be

⁴See Chapter IX, *infra*.

employed, and each of the various factors which are studied in relation to success or failure on parole must be precisely defined.

We are now prepared to examine the researches themselves. We cannot use the same procedure we used in the survey of researches in causation; we shall not group these researches under the head of the method which they employ, but rather by reference to the specific question which the researches can be deemed to answer. There are, therefore, five groups of researches. The first group represents what are supposed to be researches on the deterrent effects of treatment; the remaining four represent researches on what are supposed to be the reformatory effects of treatment, but for reasons already given we shall completely ignore the concepts of deterrence and reformation in relation to these researches. We shall consider and criticize them in relation to the five specific questions under which they are grouped.

Section 2. A Survey of Empirical Studies of the Treatment of Offenders.

I. WHAT IS THE CRIME RATE, OR WHAT ARE RATES FOR SPECIFIC CRIMES, EITHER CONTEMPORANEOUS WITH OR SUBSEQUENT TO THE APPLICATION OF A GIVEN MODE OF TREATMENT?

The following examples are representative of empirical investigations *which are supposed* to determine deterrent effects of various modes of treatment. We offer them not in that light, but as researches the data of which answer the above question.

That the imprisonment for life of habitual offenders is lacking in deterrent effect is supposed to be evidenced by the report of surety companies that losses by burglary and robbery were much greater in 1928 than in 1926.⁵ Evidence to the contrary is offered in the form of reports that after the Fourth Offenders' Act became effective in New York, the number of burglaries and robberies and the financial losses from such crimes greatly de-

⁵E. H. Sutherland, Report to Columbia Criminological Survey, Manuscript, 1930, p. 69.

creased.⁶ These assertions are not based upon careful empirical work, but even if they were, it would be difficult to interpret them significantly.

Statistical studies have been made of the deterrent effect of the death penalty, as the result of which it has been asserted: (1) The homicide rate is higher on the average in states which retain the death penalty than in states which have abolished it, and higher on the average in states which retain it than in adjoining and somewhat similar states which have abolished it. (2) European countries which have abolished it have, on the average, lower homicide rates than the adjoining countries which have retained it. (3) States which have abolished the death penalty have subsequently had no unusual increase in the homicide rate. (4) When, about a century ago, other penalties were substituted for the death penalty in the case of a large number of offenses, the rates of conviction for those offenses did not increase.⁷

On the surface these studies seem to indicate that the death penalty is inferior to life imprisonment as a deterrent, but, as Sutherland has pointed out,⁸ a careful examination of their statistical procedures produces skepticism regarding the whole array of "facts". The homicide rate is very inadequate as an index of the murder rate. The deterrent effect of the death penalty arises not solely from its presence on the statute books, but also from the degree to which it is used. The number of other variables which these comparisons have ignored is extremely large. The figures themselves do not tell whether the lower homicide rate is the effect of the abolition of the death penalty or the cause of the abolition of the death penalty, or whether both the lower homicide rate and the abolition of the death penalty are effects of the general culture and composition of the population.

⁶Report of the Crime Commission of New York Albany: 1927, pp 8-12; New York's bad men not so bad now. Saturday Evening Post, March 26, 1927, 34; Literary Digest, August 6, 1927, 12

⁷E. R. Calvert, Capital punishment in the twentieth century London G. P. Putnam's Sons, 1927; R. T. Bye, Capital punishment in the United States. Phila.: Committee on Philanthropic Labor of Phila. Yearly Meeting of Friends, 1919.

⁸Sutherland, Criminology, pp 370-371

Some meagre evidence has been obtained as to the deterrent effects of probation. There were more crimes of dishonesty per 100,000 of the population in 1908, the year following the passage of the English Probation Act, than in 1925.⁹ The English courts which use probation in cases involving offenses against property more frequently than the average of all English courts, have, in general, lower rates of conviction for dishonesty than those which use probation less frequently than the average. When the English courts were arranged in a regular series with those that use probation in the largest proportion of cases at the top, and those which use it least at the bottom, the upper quartile showed an increase in convictions for dishonesty from 1924 to 1925 in 20% of the courts, while the lowest quartile had an increase in convictions in 65% of the courts.¹⁰ This evidence is not conclusive because of the short period covered and the large number of other variables that may be involved, but, as Sutherland suggests,¹¹ it is an illustration of a method which may be useful in a more general attempt to appraise the deterrent effects of probation.

In 1915 there were 29,280 cases of crimes against property and person in the lower courts of Massachusetts, whereas in 1928 there were 21,625 cases pending.¹² This decrease of 7,555 has been attributed by Tannenbaum¹³ to the decrease in commitments to penal institutions and the concomitant increased use of probation, but, as Bates suggests, the decrease may be due to increased efficiency on the part of the judges and charitable organizations. And, of course, still other factors may have accounted for the decrease, such as a diminution of the efficiency of law enforcement agencies as a result of the World War.

II. WHAT IS THE RATE OF RECIDIVISM FOR A GROUP OF OFFENDERS TO WHOM A GIVEN MODE OF TREATMENT HAS BEEN APPLIED?

⁹C. M. C., The criminal statistics of 1925 Howard Journal, 1927, 2, 115-119.

¹⁰*Ibid*

¹¹Sutherland, Report to Columbia Criminological Survey, p 198

¹²S. Bates, Program of protective penology (in Indiana Conference on Law Observance and Enforcement. Indianapolis: Wm B Burford Printing Co, 1929, p 99).

¹³National Commission on Law Observance and Enforcement, Report on penal institutions, probation and parole. Washington Government Printing Office, 1931.

III. WHAT ARE THE COMPARATIVE RATES OF RECIDIVISM FOR GROUPS OF OFFENDERS TO WHOM DIFFERENT VARIETIES OF THE SAME MODE OF TREATMENT HAVE BEEN APPLIED?

IV. WHAT ARE THE COMPARATIVE RATES OF RECIDIVISM FOR GROUPS OF OFFENDERS TO WHOM DIFFERENT MODES OF TREATMENT HAVE BEEN APPLIED?

Since in a great many cases the data of a given piece of research are used to answer more than one of the above questions, it is convenient to report the researches in a single group. The discussion of a given piece of research will always indicate to which of the questions the data are relevant.

(1) *Juvenile Court.* The juvenile courts have claimed that a comparatively small proportion of their cases became recidivists, generally not over 25%. The Judge Baker Foundation¹⁴ reports that 29% of the delinquents who had appeared in the Boston Juvenile Court in the year 1911-1912 were returned to the Court during the five-year period 1911-1916, and that 1.3% were returned five or more times. Cooley¹⁵ found that of 2,957 offenders arraigned in Court of General Sessions in 1925-1926, 52.8% were making their first appearance in an adult court, and that, so far as known, 8.3% had not previously appeared in a juvenile court. Of the 145 men committed to prisons and the reformatory in New York in August and September, 1926, 42% had appeared at least once in a juvenile court.¹⁶

Healy and Bronner¹⁷ have worked in the field of juvenile delinquency for more than twenty years, and they have published a study of 4,000 juvenile offenders in Chicago and Boston. The data which they have collected have been made the basis for an evaluation of the reformatory efficacy of the juvenile court. Thus,

¹⁴Judge Baker Foundation, Pub. 1, Harvey Humphrey Baker. Boston, Mass.: Judge Baker Foundation, 1920

¹⁵Probation and delinquency New York: Catholic Charities of the Archdiocese of N. Y., 1927, pp. 86-87.

¹⁶Sub-Commission on Causes and Effects of Crime. Individual studies of 145 offenders. Albany: The Crime Commission of New York State, 1928, p. 22.

¹⁷Delinquents and criminals. New York: The Macmillan Co., 1926, pp. 28, 31.

as evidence of the failure of the juvenile court, it is pointed out (1) that of 675 juvenile recidivists in Chicago, 55% had records of vice and crime after juvenile court treatment, and that of the 256 male offenders in this group, 15% became professional criminals and 5% committed homicides; and (2) that of 420 boys who appeared in Chicago juvenile courts, 209 later turned up in the adult courts.

However, the more immediate purpose of Healy and Bronner was to compare juvenile delinquency in Chicago and in Boston. Of their 4,000 cases, 2,000 were taken from each city. Among the items which they compared were the juvenile courts of the two cities. The Boston court had four times as many cases in proportion to population as the Chicago court.

The significance of such studies is doubtful, either as indicating the reformatory efficacy of the juvenile court as a method of treating juvenile offenders or as indicating the comparative efficacy of different juvenile courts. While the juvenile court may be regarded as an institutionalized form of dealing with delinquents, its efficacy cannot be determined by ascertaining the after-careers of delinquents who have appeared in the juvenile court. It cannot be concluded either that if the proportion of delinquents who become recidivists is small, the juvenile court is efficacious as a reformatory; or that if the proportion is large, it is inefficacious. There are too many other factors which might account for either result. Moreover, the juvenile court constitutes an extremely complex mode of treatment. The methods employed by a single court vary widely, and those employed by different courts in different communities vary even more widely.

For example, of 256 male failures in Chicago, referred to in the study of Healy and Bronner, 86% had been committed as juveniles, and of 164 successes, 56% had been committed. Juvenile court treatment which includes commitment to an institution is obviously a different method of treatment from that which does not include commitment. And it is difficult to draw any conclusion from the fact that of 311 boys committed, 70% were failures whereas of 109 who were not committed only 34% were

failures. There are too many factors unaccounted for. The committed boys may, for example, have constituted the more difficult cases and for that and other reasons the two groups may not have been strictly comparable. These figures may indicate only that the more serious the delinquent's offense and the more difficult the delinquent, the more likely he is to be sent to an institution and the more likely he is to repeat his offense after he is released.

The only way in which the effects of different types of treatment of young offenders by juvenile courts can be measured is to select two groups comparable for age, mentality, environment, etc., and to compare the results in the case of the delinquents who were committed to institutions with the results in the case of those who were not committed. As Dr. Thomas says, "We have as yet no adequate test of the relative success of institutional and non-institutional treatment for the same type of offender."¹⁸ In the same way comparative studies of different juvenile courts cannot be significant if differences in their methods are ignored. Thus, Healy and Bronner's study fails to furnish us with a measure of the comparative efficacy of the Chicago and Boston courts because of the great number of variables that were uncontrolled. While the Boston court had a disproportionately large number of cases, a vast number of delinquents were dealt with in Chicago by police officers who were especially assigned to deal with juvenile offenders. In other words, in some communities cases are handled by social workers and the police which in other communities are brought before the court. At the least, a measure of the efficacy of the juvenile court, to be significant, must be based upon a comparison of a community with developed juvenile court methods and a community with the older method of dealing with juvenile delinquents.

There have been a few studies of the efficacy of reform schools. De Las Heras¹⁹ reports that less than 20% of the inmates of the

¹⁸W. I. Thomas, Report to Columbia Criminological Survey, Manuscript, 1930 Section II, p. 9

¹⁹La juventud delincuente en España y su tratamiento reformador. Alcalá de Henares: Imp. de la Escuela Ind. de Jóvenes, 1927. (Abstract J. Crim. Law and Criminol., 1928, 19, 287.)

reform school at Henares became recidivists in spite of the fact that there is no indeterminate sentence or provision for supervision after release. Scudder²⁰ reports similar success for the Whittier School for juvenile delinquents in California; about 80% of the cases on placement are, according to follow-up records, reformed during the first few years after leaving school.

(2) *Whipping*. Whipping is a punitive measure in the state of Delaware. Census figures for the year 1904 show that of 461 offenders whipped in that year, 16% had been whipped previously, and 4% had been whipped previously two or more times.²¹ In England, where whipping is also practiced, 25% of the juvenile delinquents who have been birched reappear in the court within thirty days, and over 76% within two years.²² More offenders reappear after this penalty has been inflicted than after any other method of treatment. This, however, is doubtless because whipping is used only in the case of the delinquents who are regarded as most vicious. Here we have a good example of the ambiguity of estimates of the efficacy of methods of treatment based upon census figures which are not supplemented by other relevant data.

(3) *Fines*. 23% of the persons fined in Springfield in 1913 were arrested later during the same year, and 13% were again convicted. The Springfield survey committee concluded that fines were especially ineffective in dealing with cases of prostitution, keeping disorderly houses, running gambling houses, drug addiction, etc.²³ 2% of the offenders in Kansas City who were given an opportunity, during the fiscal year ending April 21, 1913, to pay their fines in installments were charged with subsequent crimes, as compared with at least 25% of all the cases brought into court.²⁴

²⁰The contagion of a good environment. *J Juv Res.*, 1929, 13, 258-261.

²¹Current Literature, 1905, 38, 487-489

²²C Burt, *The young delinquent*. London University of London Press, 1925, p. 121.

²³Z. L. Potter, *The correctional system of Springfield, Ill.* New York: Russell Sage Foundation, 1915, pp. 19-30

²⁴Chicago Municipal Reference Library, *The payment of fines in installments by offenders*. Chicago: Chicago Public Library, 1914.

(4) *Imprisonment.* About 47% of the persons committed to jails and workhouses in the United States in the first six months of 1923 had been previously committed. This involves some duplication of cases; but, on the other hand, the previous criminal record was not accessible in a large proportion of the cases, and it is probable that the proportion of offenders who become recidivists after imprisonment is closer to 75% than 50%.²⁵ 59.8% of all persons committed to prisons in Massachusetts in 1927 had records of previous commitments, and the average number of commitments was 5.43 per recidivist.²⁶ The more intensive studies of prisoners in the United States show that about two-thirds of them are recidivists.²⁷ The proportion of recidivists in England and in Germany is about the same as in the United States. 70% of the persons confined in English prisons in 1927 had been convicted previously; 49% had been convicted three or more times; and 23%, eleven or more times.²⁸

The Gluecks²⁹ have made an intensive study of the criminal careers of 500 offenders who served terms in the Massachusetts reformatory. They found that 63.8% of their cases committed serious offenses either during the parole period or during a five-year post-parole period; that an additional 20.5% committed minor offenses either in the parole or post-parole period; and that only 15.7% had no criminal records following their release from parole. However, the data for this group of 500 cases are susceptible to another interpretation. Prior to incarceration the entire group had committed a total of 1,450 serious crimes. They committed 413 serious crimes in the post-parole period, only one-third as many as before incarceration; furthermore, among the serious crimes in the post-parole period, 25% were classified as "escape or rescue, fugitive from justice, desertion or dishonorable dis-

²⁵Department of Commerce, Bureau of the Census, Prisoners, 1923. Washington. Government Printing Office, 1926, pp. 150-151.

²⁶Mass., Annual report of the Commissioner of Correction for the year ending Nov. 30, 1927, p. 107.

²⁷B. Glueck, A study of 608 admissions to Sing Sing prison. *Ment. Hygiene*, 1918, 2, 85-151.

²⁸Judicial statistics England and Wales 1927. Criminal statistics. London: H. M. Stationery Office, 1929, pp. 162-163.

²⁹500 criminal careers. New York: Alfred A. Knopf, 1930.

charge from the Army or Navy, and serious automobile offenses". Nevertheless, the Gluecks' study seems to show that the behavior of these offenders after incarceration was not greatly improved, and that the claims which are sometimes made for imprisonment as a reformatory agency are questionable.

The Massachusetts reformatory is generally regarded as one of the most efficient correctional institutions in the United States, and it has been defended against the Gluecks' figures on a number of grounds, which we summarize. The period covered by the Gluecks' study was the war and immediate post-war period during which the institution was operating below its usual efficiency. In any event, no penal or correctional institution should be expected to reform all of its inmates, since many of them have proved to be recalcitrant to all other social institutions and influences. All of the offenders in this study had committed serious crimes before incarceration, and the proportion that committed serious crimes subsequently was only about 50%. The total number of serious crimes committed by the group after release was only about one-third of those committed prior to imprisonment. Furthermore, the fact that the prison is the last institution which deals officially with the offender before his return to crime does not necessarily place on it the responsibility for his recidivism. There are other causal influences operating in the post-parole period, particularly the kind of reception which the released prisoner receives from the community. Moreover, behavior irregularities after imprisonment do not necessarily indicate that imprisonment has had no reformatory effects.

The research of Mabel Elliot⁸⁰ is interesting in this connection. She studied 110 white girls committed to Sleighton Farms, and found that 76.3% of them were "adjusted" ten years after their discharge, although 51% of the adjusted girls achieved their adjustments only after serious sexual misbehavior and 18% more, only after serious misbehavior of other kinds. Thus, 69% of those who finally became adjusted had intervening periods of

⁸⁰Correctional education and the delinquent girl Harrisburg, Pa.: State Department of Welfare, 1929

moral relapse. It is, of course, by no means clear that the institution can be credited with the ultimate adjustment of these girls or that the number who finally became adjusted might not have been greater if they had been treated in some other way.

The Gluecks' study also yielded data relative to the effectiveness of imprisonment with respect to specific offenses. 305 burglaries were committed by the group which they studied prior to incarceration, and only 12 in the post-parole period. 938 larcenies were committed before incarceration, and only 213 in the post-parole period. 80 robberies were committed before incarceration, and only 41 in the post-parole period. 60 rapes were committed before incarceration, and only 8 in the post-parole period. 24 homicides were committed before incarceration, and only 16 in the post-parole period. In general, the crimes ordinarily regarded as serious thus decreased very considerably after incarceration. Of the less serious crimes, 1,004 were committed before incarceration, and 650 after parole.

Spaulding³¹ made a study of 44 psychopathic delinquent women released from Bedford Reformatory. Approximately one-third of them who were alive and could be located were satisfactorily adjusted. The number of cases is very small, and the investigation of the factors responsible for their post-prison careers is not intensive enough to warrant any interpretation of these findings.

Studies have been made of the relation between the length of imprisonment and recidivism. Burgess³² concluded from his study of parole that the longer a prisoner remains in prison, the more likely he is to violate parole when released. Cape³³ reports the contrary finding that in Wisconsin the rates of recidivism after short sentences are higher than after long sentences. Thus, 13.16% of prisoners confined one year became recidivists; 6.22% of those confined for two years became recidivists; 3.61% of those confined for three years became recidivists; and 1.27%

³¹Spaulding, *Psychopathic Delinquents*, p. 100. New York. Rand McNally & Co., 1923.

³²Factors determining success or failure on parole. *J. Crim. Law and Criminol.*, 1928, 19, 241-286.

³³The comparative effectiveness of the short and long time prison terms. *M. A. Thesis, U. of Wis.*, 1925, pp 32, 34.

of those confined for ten years or more became recidivists. The significance of these figures may be questioned, however. For example, a large proportion of the short term prisoners were drunkards, whose return to crime may have been affected much more by the drinking habit than by the length of the prison term. Furthermore, those who received longer sentences had less time after their discharge in which to commit further crimes, since the study was confined to a ten-year period. Studies of this sort which merely correlate length of term with percentages of recidivism quite obviously ignore a great number of relevant variables.

(5) *Probation.* A study has been made of the efficacy of probation in New York State for the period 1907-1921.⁸⁴ Probation is here defined as suspended sentence with supervision. Of 206,298 persons discharged from probation, 78.5% were discharged as improved, 10.9% were rearrested and committed, 5.7% were discharged as unimproved and 4.9% absconded. A study made in 1923 revealed that of 383 males placed on probation in 1915, 35% had subsequent court records.⁸⁵ No information was available for 21%. The utility of this information is, of course, conditioned upon the value of the category "subsequent court record" as an index of actual criminality and upon the assumption that the omitted cases would exhibit the same tendency as the recorded ones.

Chute⁸⁶ made a study of the New York probation records for the year ending June 30, 1917. Of 21,847 probationers, 76% completed probation with improvement, 13% were returned to court for sentence and 5% could not be traced. Cooley⁸⁷ made a study of the relation between probation and delinquency. He concluded that 85% of probationers handled by the New York Probation Bureau are likely to become permanently adjusted to

⁸⁴Probation in New York State. J. Crim. Law and Criminol., 1923, 14, 138-147; also published as F. A. Moran, Probation in New York State. Albany State Probation Commission, 1923.

⁸⁵Mass. Commission on Probation, Inquiry into the permanent results of probation, Senate Doc. No. 431, 1924, p. 12.

⁸⁶Success of probation in New York. J. Crim. Law and Criminol., 1918, 9, 302-304.

⁸⁷Probation and delinquency, p. 297.

the community. Other probation departments report that two-thirds, three-fourths or four-fifths of their probationers behave satisfactorily while on probation, and that the remainder abscond or are returned to court charged with new crimes or with violations of probation regulations.³⁸ Of 200 individuals placed on probation in Erie County in 1917, 14.3% absconded or were re-arrested while on probation or were discharged without improvement at the end of the probation period; an additional 7% were re-arrested during the two and one-half years subsequent to release from probation. However, ten of these were reported to be living in a satisfactory manner at a later date.³⁹ Of 15,094 persons placed on probation in England in 1925, only 733 subsequently came up for sentence.⁴⁰ However, about half the juvenile delinquents who are placed on probation in Cardiff, Wales, reappear in court within five years.⁴¹

(6) *Parole*. The reports of parole boards usually estimate that about three-quarters of their parolees behave satisfactorily while on parole. Thus, of 11,903 individuals paroled in Indiana from 1897 to 1918, 60.4% were discharged after satisfactory periods of parole; 28.26% violated their parole and of these, 57% were returned to institutions.⁴² The New York City police department reports that of 1,558 paroled prisoners placed in its charge in 1916, less than 10% were imprisoned for violation of parole.⁴³ From 10% to 25% of the violations take the form of new crimes. However, parole officers have so little contact with parolees that the accuracy of these figures is questionable. The Gluecks⁴⁴ found that of the parolees whom they studied, 51 had been rearrested without the knowledge of the parole officers. Furthermore, the

³⁸Sutherland, Report to Columbia Criminological Survey, p 199

³⁹The acid test Manuscript, Erie County Probation Association, n d

⁴⁰C. M. C., The criminal statistics, 1925 Howard Journal, 1927, 2, 115-119.

⁴¹Great Britain, Home Office Fourth report on the work of the children's branch. H. M. Stationery Office, 1928

⁴²Parole in Indiana during twenty-one years. J. Crim. Law and Criminol., 1918, 9, 454-455

⁴³L. V. Harrison, Undermining crime Manuscript, Ch. 9, p 14.

⁴⁴500 criminal careers, p. 178.

reports of parole boards refer only to the period of parole, and the parolee may behave properly while on parole but commit further crimes when released from parole. Several investigations have been made in this connection, most of which have concluded that only in a fairly small proportion of the cases do those who have been successful on parole return to crime. None of these studies, however, is sufficiently analytic and detailed to warrant any conclusions as to the value of parole.

Some work has been done on the relation between success on parole and types of offenders. While slight relationships between success on parole and such factors as mentality, previous criminal record, type of crime and previous work record have been indicated by some of these studies, their conclusions are inconsistent.⁴⁵

(7) *Probation and Imprisonment.* The records from 1923 to 1926 of 305 persons placed on probation in 1923 by the Supreme Court of Baltimore, and of 305 convicts released from the Maryland Penitentiary for a period of two years (including the year 1923), were compared.⁴⁶ 112 of the probation group and 109 of the prison group were arrested; the probation group had 243 separate arrests and the prison group 339. 58 of the probation group and 53 of the prison group were convicted in police courts. 31 of the probation group and 41 of the prison group were convicted in the criminal court. 63 of the probation group and 42 of the prison group became problems for social agencies. On the whole, the behavior of the probation group was not greatly different from the behavior of the prison group. It is not unlikely that some of the members of the prison group were on parole, and this study might therefore be regarded as a study of the relative efficacy of probation and parole methods.

⁴⁵The only really significant work on this problem is part of elaborate studies of recidivism made by Burgess and the Gluecks. These will be discussed later.

⁴⁶J. M. Hepburn, *Probation and penal treatment in Baltimore*. J. Crim. Law and Criminol., 1928, 19, 64-74.

V. CAN A GROUP OF PAROLEES BE DIFFERENTIATED INTO SUB-GROUPS OF SUCCESSFUL AND UNSUCCESSFUL PAROLEES BY REFERENCE TO A SET OF FACTORS, OF WHICH SOME VARIETY OF IMPRISONMENT IS ONLY ONE?

(1) R. Pintner and J. C. Reamer⁴⁷ combined the ratings of three separate experts for "future parole success" of twenty-six delinquent girls. Using these ratings as a "measure of success", they correlated them with intelligence scores and obtained a coefficient of correlation of $+0.16$.

(2) W. W. Clark⁴⁸ correlated the intelligence scores of 223 paroled, discharged and furloughed Whittier School boys with ratings for success based on records of their conduct after release. He obtained a coefficient of $+0.19$.

(3) The first elaborate study of parole success in which a large number of factors were considered, appears to have been that of S. B. Warner.⁴⁹ He examined the parole records of 600 cases taken from the parole records of the Massachusetts Reformatory. Three hundred were successful and three hundred unsuccessful on parole. Selecting for analysis 64 factors, many of them based on the prisoners' own stories and therefore of doubtful accuracy, he divided each factor into a number of sub-classes. He found the percentage of the total number of unsuccessful cases in each sub-class, and the corresponding percentages for the successes. He also included for comparison the same data for 80 cases which were not paroled. Table No. 1 will illustrate his method:

⁴⁷Mental ability and future success of delinquent girls J. Delinq., 1918, 3, 74-79.

⁴⁸Success record of delinquent boys in relation to intelligence. J. Delinq., 1920, 5, 174-182.

⁴⁹Factors determining parole from the Massachusetts Reformatory. J. Crim. Law and Criminol., 1923, 14, 172-207.

RESEARCHES IN TREATMENT

TABLE 1

Work in Reformatory School	Successes	PERCENTAGE DISTRIBUTIONS	
		Violators	Not Paroled
All paroles studied.....	100	100	100
Good	23	23	3
Fair	17	15	10
Bad	2	2	0
Not answered	58	60	87

In determining whether an offender should be paroled, the parole board had considered only four factors: (1) the nature of his offense (sex offenders and gunmen were denied parole not primarily because of their incorrigibility but mainly as a deterrent); (2) his prior criminal record; (3) the number of marks for bad conduct; and (4) the length of time the prisoner had been in the reformatory. Although these four factors were, with the possible exception of prior criminal record, admittedly poor criteria of success on parole, Warner concluded that his complete schedule of sixty odd factors, with the possible exception in isolated instances of the alienist's report, was of no greater utility for the purposes of prediction.

(4) H. Hart⁸⁰ analyzed Warner's data and concluded that they might be of considerable value in predicting success upon parole. He found, by using the Yule and Davenport formulae for the reliability of differences of percentages, that fifteen of the percentage differences that Warner had dismissed as insignificant were statistically significant, and that twenty additional differences were probably significant, although not as clearly so. These factors included in addition to the nature of the offender's crime, which Warner himself stressed, his home environment, his character, physical condition, etc. Hart also recombined Warner's data for thirty of his sub-classes so as to show the percentage of total successes in a given sub-class (See Table No. 2). This arrangement showed differences which Hart suggested might

⁸⁰Predicting parole success. J. Crim. Law and Criminol., 1923, 14, 405-413.

be significant for predicting parole success, and which should therefore be combined into prognostic scores. This suggestion has been carried out with considerable success in the work of Burgess, the Gluecks and Vold which we shall later discuss.⁵¹

TABLE 2

CLASSIFICATIONS OF PAROLED PRISONERS FROM THE MASSACHUSETTS REFORMATORY, SHOWING THE PERCENTAGES OF SUCCESSFUL PAROLES AND PAROLE VIOLATIONS FALLING INTO EACH GROUP, AND SHOWING WHAT PERCENTAGES OF THE PRISONERS PAROLED IN EACH GROUP SUCCEEDED.

Warner's item number	Characteristics for which observed contrasts are quite unlikely to be due to chance	WARNER'S PERCENTAGE DISTRIBUTIONS		Per cent successful in sub-class
		Successful paroles	Parole violations	
	All paroles studied..	100	100	49.75
38	Men guilty of "other" crimes	11	2	85
37	Partly support un- named persons. ...	14	2	88
38	Men guilty of assault and battery.	10	3	77
34	Occupation "none" ..	6	2	75

(5) H. L. Witmer⁵² examined the records of 214 parolees from the Wisconsin State Prison and 229 from the Wisconsin Reformatory for Men, all of whom had been reported as successful on parole; and of 116 from the Prison and 48 from the Reformatory, who had been returned for violation of parole. Using the Warner method, she compared the percentage distributions for some fifteen factors (including various phases of pre-commitment, prison and parole life), and concluded that there were significant differences for the factors of previous record, offense causing commitment (e.g. men committing lesser crimes are more likely to repeat their offenses), grades in reformatory school, place of

⁵¹See pp. 196-210, *infra*.

⁵²Some factors in success or failure on parole. *J. Crim. Law and Criminol.*, 1927, 18, 384-403.

residence before commitment and amount of monthly earnings; some of the other differences are attributable to such factors as age and sampling. Her method of combining the data into percentage form and her failure to determine the reliability of the percentages impair the value of her conclusions.

(6) A somewhat different method of evaluating the influence of various factors upon parole success was employed by H. G. Borden.⁵³ He examined the records of 263 consecutive male parolees from a reformatory. He selected 27 items, including intelligence, pre-institutional and institutional behavior, temperament and occupation, and correlated each separately with parole success. He also obtained multiple correlations between various combinations of factors and parole success. His highest coefficient was between steadiness of employment while on parole and "success", in which r was .419; the correlation with "fewer commitments" was .202. The multiple correlation between "success" and the combined scores for "diagnosis of intelligence" ($r = -.164$), "psychologist's prognosis" ($r = -.161$), and "previous commitments" ($r = -.202$), was $+.4071$. He does not describe his statistical method or his data in sufficient detail to permit critical analysis of his results. However, it seems likely that the Pearsonian coefficients which he used were not suitable for the greater part of his data which were incomparable when arranged in step intervals.

(7) E. W. Burgess⁵⁴ appears to have been the first investigator to carry out Hart's suggestion of formulating prognostic scores for parole success. He studied the records of 1,000 cases from the Illinois State Penitentiary at Joliet, 1,000 from the Southern Illinois State Penitentiary at Menard and 1,000 from the State Reformatory at Pontiac. He selected 22 factors such as nature of the offense, previous criminal record, parental and marital status, neighborhood and community, previous work record, age,

⁵³Factors for predicting parole success. *J. Crim. Law and Criminol.*, 1928, 19, 328-336.

⁵⁴Factors determining success or failure on parole. *J. Crim. Law and Criminol.*, 1928, 19, 241-286.

mentality, personality type and punishment record in the institution. Each of these factors was divided into sub-classes and the percentage of parole failures in each sub-class was determined.

Burgess then prepared scores for the prediction of parole success in the following manner: Taking the rate of violation of the institution as a base, he credited each parolee from that institution with one point for each sub-class in which he appeared and in which the violation rate was less than the average for the institution. For example, Table No 3 shows that 22.1% of the prisoners paroled from Pontiac violated parole, but that only 14.8% of Burgess' cases from that institution with a psychiatric prognosis of "favorable outcome" violated parole. Therefore, Burgess credited each of these cases with one point. In the same way, he credited each of his cases which had received a prognosis of "doubtful outcome" with only one point; while those with a prognosis of "unfavorable outcome" received no credit. By adding number of points obtained by each offender for the various factors, Burgess got scores for each offender ranging from

TABLE 3
PSYCHIATRIC PROGNOSIS OF OUTCOME ON PAROLE

Psychiatric Prognosis	PONTIAC Per cent violating	MENARD Per cent violating	JOLIET Per cent violating
All persons.	22.1	26.5	28.4
Favorable Outcome. . .	14.8	21.4	20.5
Doubtful Outcome . . .	17.6	28.1	51.4
Unfavorable Outcome..	30.5	33.8	49.2

0 to 21. He divided these scores into class intervals (See Table No. 4) and discovered the percentage of cases in each class interval who were parole violators. This table was designed as a device for predicting parole success. For example, of the 25 Joliet cases with scores from 2 to 4, 76% had violated parole. Thus it can be seen that if the table is accepted at its face value, the chances that a man with a score ranging from 2 to 4 will violate parole, are

approximately 76 in 100; while the chances that a man with a score ranging from 16 to 21 will do so, are only 1.5 in 100. Burgess prepared separate tables for each of the institutions which he studied.

TABLE 4

EXPECTANCY RATE OF PAROLE VIOLATION AND NON-VIOLATION
(FOR JOLIET)

Points for number of factors above the average	Number of men in each group	Per cent violators of parole	Per cent non-violators
16-21	68	1.5	98.5
14-15	140	2.2	97.8
13	91	8.8	91.2
12	106	15.1	84.9
11	110	22.7	77.3
10	88	34.1	65.9
7-9	287	43.9	56.1
5-6	85	67.1	32.9
2-4	25	76.0	24.0

This work is to be criticized for its crude approximate statistical technique. For instance, at Pontiac it was found that in cases involving a regular work record prior to commitment, or emotional instability, or very superior intelligence, or sentences of less than one year, or rural origin, the violation rate was half the institutional violation rate. Inversely, the parole violation rate was double the average in cases where prior to his arrest the criminal had lived in the underworld or in a rooming house, or where the judge or prosecuting attorney had protested against leniency, or where there was a sentence of five years or over, or where the offender was brought up in an institution, or where he was a professional criminal. Yet no attempt was made to take account of the extent of the divergencies from the norm which were encountered in each sub-class.

(8) C. Tibbitts⁵⁵ has executed a study along the lines laid out by Burgess but with a few technical embellishments. He studied a group of 3,000 cases from the Illinois State Reformatory at Pontiac, whereas Burgess had chosen his group from three different institutions. He also added four additional factors to Burgess' schedule: use of alcohol, nature of community the individual was to be paroled into, last work assignment inside the institution and first job on parole. The first of these four, together with marital status, was subsequently discarded.

The violation rate for the 3,000 offenders was 24.7%. This made it possible for Tibbitts, after he had classified these offenders, to distinguish between the various classes according as they were more likely to violate parole (i.e. had a violation rate less than 24.7%). We present in Table No. 5, which we have prepared, some of these classes differentiated on that basis.

TABLE 5

More Likely to Violate Parole		Less Likely to Violate Parole	
Hoboes	40	Farm boy	15.1
Ne'er-do-wells	46.4	Criminal by accident....	17.7
Paroled to rooming house community.	54	Paroled to farm.....	17
Habitual criminals.	58.8	First offenders.	12.9
Never employed.	38.5	Skilled laborers regularly employed	5.6
Sexual psychopaths	40	Emotionally unstable. ...	16.6
Neuropaths and psychotics	38.1	Sex offenders	8
Feeble-minded	37	Eleven months' sentence or less	13.7
"Lone wolves"	33.1	Prior recommendation of leniency.....	12.9
Negroes.	35.7		
Irish	31		

⁵⁵Success or failure on parole can be predicted. A study of the records of 3,000 youths paroled from the Illinois State Reformatory. J. Crim. Law and Criminol., 1931, 22, 11-50.

TABLE 6

EXPECTANCY RATES OF PAROLE VIOLATION AND NON-VIOLATION

Groups of Factors According to Number of Points	Number of Cases	EXPECTANCY RATES FOR SUCCESS OR FAILURE <i>Per cent of Parole Violators</i>			
		Minor	Major	Total	Per cent Successful
15-0					
12-0	37	0 0	0.0	0.0	100.0
12-1					
10-0	144	2.1	2.8	4.9	95.1
10-1					
9-2	236	4.7	2.5	7.2	92.8
9-3					
7-2	485	5.8	5.3	11.1	88.9
7-3					
6-2	331	6.3	9.4	15.7	84.3
6-3					
5-2	227	6.2	11.9	18.1	81.9
5-2					
4-2	434	8.3	16.4	24.7	75.3
4-3					
3-3	409	11.5	19.1	30.6	69.4
3-4					
2-3	283	14.5	28.3	42.8	57.2
2-4					
1-4	234	12.8	36.8	49.6	50.4
1-5					
0-9	172	15.7	38.9	54.6	45.4
0-10					
0-11	8	0.0	100.0	100.0	0.0
All Cases	3,000	8.6	16.1	24.7	75.3

Tibbitts found that the offenders who had served the longer terms or who were of inferior or very inferior intelligence, were more likely to violate parole and that the younger offenders and those of superior intelligence were less likely. The tetrachoric coefficient of correlation between Parole Violation, Habitual Offenders and First Offenders was $+0.179$, the highest of the several tetrachoric r 's which Tibbitts got.

On the basis of the proportion of violators and non-violators falling into each of his classes, Tibbitts discriminated between factors which are favorable and those which are unfavorable to parole success. He then eliminated from these factors all which had a violation rate ranging from 20% to 30%, i.e. a rate 5% above or below the average for the whole group. This procedure resulted in the elimination of one class of factors, leaving 22 classes. No offender with any unfavorable factor had more than fifteen favorable factors, while no offender with any favorable factor had more than eleven unfavorable factors. The diagnostic value of the results obtained by this process are set forth in Table No. 6.

(9) While the study of S. Glueck and E. T. Glueck⁵⁶ is quite similar in general character to that of Burgess, it differs in technique in several respects. The Gluecks worked with 510 men whose parole from the Massachusetts Reformatory expired during 1921 or 1922. These men were, when judged by such factors as psychiatric diagnosis, age distribution and prior recidivism, typical criminals. In over 90% of the cases, an extremely high percentage, the history of each man included practically complete information for the five-year post-parole period (1922-1927). Their post-parole and pre-commitment records were considerably more accurate and more detailed than those employed in prior studies. The preparation of these records was the result of a persistent three years' investigation that included the analysis of all available public records and interviews with acquaintances and relatives of the parolees, with officials with whom they had come into contact and with the parolees themselves wherever prac-

⁵⁶500 criminal careers.

ticable. It is therefore interesting to compare Burgess' finding that 28% of the offenders paroled from Joliet violated their parole, with the Gluecks' that 62% of the 422 offenders, whose post-parole criminality they were able to ascertain, were total failures during the five-year post-parole period, and that an additional 17% were partial failures.

After exhaustive percentage enumerations for some fifty factors, classified according to a temporal scheme as pre-detention, reformatory, parole and post-parole factors, the Gluecks calculated coefficients of contingency with parole success for each of these factors. They then eliminated all those factors whose coefficients were small, and which therefore seemed to have only a negligible relation to success or failure on parole.⁸⁷ Thirteen factors were left. The coefficients of contingency between each of these factors and success during the five-year post-parole period are set forth in Table No. 7 on the next page.

The Gluecks also constructed a prognostic table similar to that of Burgess. Each factor was divided into various sub-classes similar to Burgess'. Individual scores were then constructed by a new method, that of adding the percentage of failures in the respective sub-classes in which each offender fell. Table No. 8 (page 204) shows the percentages of total failures for one factor "industrial habits". From this table it may be seen that for this factor an offender who was classified as a "good worker" received a score of 43; an offender who was classified as a "fair worker" a score of 59; and an offender who was classified as a "poor worker", a score of 68. The sum of an offender's scores for all of the factors constituted his total prognostic score.

By arranging the individual scores in class intervals and calculating the percentage of offenders in each class interval who had been successes on parole and the percentage who had been failures, the Gluecks obtained four prognostic tables, similar to those of Burgess. One, with scores ranging from 244 to "396

⁸⁷The Gluecks regarded coefficients below .2 as displaying a negligible correlation, from .2 to .4 as showing appreciable association, and from .4 to .6 as showing considerable relation. In view of the many high coefficients obtained for post-parole factors, the items showing appreciable association were eliminated and also one or two of those showing considerable relationship.

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(a)	Pre-reformatory factors (combined with above factors in prognostic table)....	
(1)	Seriousness and frequency of previous crime record.....	.36
(2)	Arrest for crimes.....	.29
(3)	Penal experience preceding reformatory .. .. .	.29
(4)	Industrial habits .....	.42
(5)	Economic responsibility ...	.27
(6)	Mental abnormality .. .. .	.26
(b)	Reformatory record: (combined with above factors in prognostic table)	
(7)	Frequency of offenses in reformatory .. .. .	.33
(c)	Parole factors. (combined with above factors in prognostic table) ...	
(8)	Criminal conduct during parole ..	.47
(d)	Post-parole factors (combined with above factors in prognostic table)	
(9)	Industrial habits .....	.59
(10)	Economic responsibility .....	.53
(11)	Attitude toward family.....	.58
(12)	Type of home.....	.48
(13)	Use of leisure.....	.46

and over", was based on the six pre-reformatory factors, and can be used in sentencing offenders. A second table, ranging from 274 to "476 and over", was based on the six pre-reformatory factors and one reformatory factor, and can be used in deciding on the parole of first offenders. A third table, ranging from 304 to "551 and over", was based on the preceding factors and the parole factor, and can be used in deciding discharge from parole. And

TABLE 8

INDUSTRIAL HABITS PRECEDING SENTENCE TO THE REFORMATORY

(COEFFICIENT, 42)

Class	Percentage of Total Failures
Good worker	43%
Fair worker	59%
Poor worker	68%

a fourth complete table, based on all previous factors and, in addition, five post-parole factors, ranging from 363 to "876 and over", can be used in determining the sentences of recidivists. This last analysis is given in Table No. 9 on the next page.

Since, as appears from Table No. 7, the coefficient of contingency of the prognostic scores with success was only .68, it is clear that their predictive value is not great, and that while they are suggestive, they can hardly be considered as definitive. However, as the Gluecks point out, the two major determinants of a judge's sentence are usually the type of offense committed and the seriousness of the offense, and these two factors show very low correlations with parole success, the coefficient of contingency between the type of offense committed and parole success being .12, and that of the seriousness of the offense and parole success being .05. The superiority of the Gluecks' criteria to the judicial criteria therefore seems indisputable.

TABLE 9

PROBABLE POST-PAROLE CRIMINALITY RATES BASED ON TOTAL-FAILURE SCORES ON SIX HIGHEST PRE-REFORMATORY FACTORS, HIGHEST REFORMATORY FACTOR, HIGHEST PAROLE FACTOR, AND FIVE HIGHEST POST-PAROLE FACTORS

Total-Failure Score	Status as to Post-Parole Criminality (Percentage)			Total
	Success	Partial Failure	Total Failure	
363-575	95.2	4.8	..	100
576-675	60.6	28.6	10.8	100
676-775	10.5	47.4	42.1	100
776-875 .....	..	22.7	77.3	100
876 and over .....	..	5.1	94.9	100
Total	29.4	19.4	51.2	100

The most interesting departures in technique by the Gluecks from that of Burgess are: (1) The Gluecks in forming their tables weighted the score of each factor according to its importance in relation to success on parole, while Burgess scored all factors alike; and (2) the Gluecks ignored all the factors which seemed to bear only a slight relation to parole violations, whereas Burgess included in his scores all the factors which he studied. For both studies the problem remains, first, whether their classifications were statistically reliable, and, second, whether the estimates based on the prognostic tables would be found accurate for any other sampling of criminals. The study of Vold sheds considerable light on these questions.

(10) G. B. Vold⁵⁸ examined the records of 1,192 men placed on parole in 1922-1927, of whom 542 were from the Minnesota State Prison at Stillwater and 650 were from the Minnesota State Reformatory at St. Cloud. He obtained data regarding

⁵⁸Prediction methods and parole Minneapolis, Minn.: The Sociological Press, 1931.

some 44 factors, of which 34 were pre-parole.⁵⁹ He formed sub-classes under each of these factors and then determined the percentage of parole violators in each sub-class in a manner similar to that employed by Warner, Burgess and Hart. He next found the coefficient of contingency between each of his 44 factors and "outcome on parole" in a manner similar to that employed by the Gluecks. The highest 20 of these coefficients appear in Table No. 10 on the next page. These coefficients are supposed to indicate approximately the relative influence upon success on parole of the factors which are tabulated.

Vold constructed 27 prediction tables based upon the 34 pre-parole factors. In each table he divided his criminals into two comparable groups of equal size, one of which he called the operative group, and the other, the control group. He then ascertained for each group the percentage of parole violators in each class interval of prognostic scores. His tables therefore contain predictive values obtained from both groups. This method provides an index of the effect of errors of sampling both upon the predictive values and upon the reliability of these values (See Table No. 11, page 209).

Vold included in his predictive tables figures based upon his reformatory cases, upon his prison cases and upon a combination of the two groups, in order to discover whether the results obtained from a study of cases from one institution were of any value in predicting the behavior on parole of cases from another institution. He concluded that the predictive value of his prognostic scores was greatest when applied to cases from the same institution, but that prognostic scores based upon the study of cases from two institutions had some predictive value when applied to cases from either.

The tables which Vold constructed for the 17 pre-parole factors showing the highest coefficients of contingency, were constructed according to the methods of both Burgess and the Gluecks, while those for the 17 showing the lowest coefficients

⁵⁹Vold also obtained data relative to four additional factors which were not particularly related to the problem of parole violation.

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Number of Cases	C*	Category compared with "outcome on parole"
1192	.283	Previous criminal record
1156	.256	Work record while on parole
1192	.241	Marital status at time of offense
1192	.237	County from which received
1187	.227	Prison punishment record
1186	.214	Social type of inmate (six-place classification)
1185	.208	Work habits prior to conviction
1191	.208	Occupation at or before conviction (six-place scale)
1192	.204	Nature of crime of which convicted
1192	.200	Size and type of community in which offense was committed
1180	.183	Size and type of community in which in- mate was brought up
1175	.179	Habits and character: whether ambitious or lazy
1180	.177	Size and type of community into which in- mate was paroled
1175	.173	Habits and character: whether honest or dishonest
1192	.164	Number of times parole agent visited in- mate on parole
1175	.149	Habits and character: use of drugs
1179	.145	Institute of Child Welfare classification of occupation
1175	.145	Habits and character: use of liquor
1189	.142	Mobility of inmate before conviction
917	.139	Estimate of inmate's mentality (by prison officials)

*The highest values here possible for "C" range between .82 and .91.

and for a combination of 25 factors selected from the two groups of 17, were constructed according to the simpler method of Burgess. Vold's purpose here was to test the Gluecks' assumption that factors showing negligible coefficients are of no predictive value. Vold discovered that the prognostic scores based upon the 17 factors with the lowest coefficients had a predictive value almost as great as those based upon the 17 factors with the highest coefficients, and that the scores based upon the 25 combined factors were definitely superior in value to those based solely upon the 17 factors with the highest coefficients.⁶⁰ When Vold correlated the scores obtained by the Glueck's weighted method with those obtained by the unweighted method of Burgess, he obtained a coefficient of $+ .922$.⁶¹

A major problem in studies in parole prediction is the reliability of the classifications upon which the prognostic scores are based and which are gotten from prison records. Vold tested their reliability. He reclassified a randomly selected group of 198 of his cases, and had 63 of the 198 cases independently classified by another investigator, with respect to some 14 factors. He then compared his original classification of the 198 cases with his reclassification, his original classification of the 63 cases with his subsequent classification of those cases and with that of the other investigator, and his second classification of the 63 cases with the independent classification. The statistics for the prison, reformatory and combined prison and reformatory groups were separately presented.

Vold discovered that his data were not in such form as to permit the accurate use of conventional methods of determining

⁶⁰In comparisons of the predictive value of these various tables two methods are resorted to: (a) Inspection of the differences between the operative and control groups, if the control group shows a similar percentage of violations in a given subclass to that of the operative group, it may be taken that the accuracy is high; (b) Inspection of the total percentage of violations in the class intervals of the scores; if the percentages vary markedly with the scores the accuracy of the table is considered high. This procedure is too qualitative. It is unfortunate that no coefficients of correlation or contingency were employed to exhibit the relationship toward the two sets of values in a simpler and more objective form.

⁶¹Vold supposed that this coefficient showed that the more laborious method of weighting is of relatively little value and that the simpler method of Burgess can be employed with no loss. This explains why Vold constructed fewer "Glueck" than "Burgess" tables.

TABLE 11

EXPERIENCE AND EXPECTANCY RATE OF PAROLE VIOLATION IN THE MINNESOTA STATE PRISON, 1922-27:
WHOLE GROUP OF 542 CASES DISTRIBUTIONS BASED ON THE AVERAGE VIOLATION RATE FOR THE
PRISON (24.7%). (BURGESS METHOD ON 25 SELECTED PRE-PAROLE FACTORS)

Points for number of factors having violation rates lower than the average rate for the institution	Number of men in each group	Experience and Expectancy Rate of Parole Violation						Percent who violated parole in			
		Violators				Non Violators		Prison Operating Group of 272 Cases	Prison Control Group of 270 Cases		
		Minor		Major		Total					
		N	Percent	N	Percent	N	Percent				
		N	Percent	N	Percent	N	Percent				
21 and over	15	..	0	..	0	..	15	100.0	..	..
19 - 20	25	..	0	..	0	..	25	100.0	..	..
17 - 18	38	..	0	..	0	..	38	100.0	..	..
15 - 16	63	..	0	..	0	..	63	100.0	..	..
13 - 14	64	..	0	5	7.8	5	7.8	59	92.2	6.5	9.1
11 - 12	88	3	3.4	9	10.2	12	13.6	76	86.4	8.5	19.5
9 - 10	81	5	6.1	22	27.2	27	33.3	54	66.7	41.7	26.7
7 - 8	78	6	7.7	21	26.9	27	34.6	51	65.4	35.7	33.3
5 - 6	54	12	22.3	20	37.0	32	59.3	22	40.7	55.2	64.0
4 or less	36	7	19.4	24	66.7	31	86.1	5	13.9	81.3	90.0
Total	542	33		101		134		408			

reliability. He therefore employed three methods, none of which could be relied upon for accurate indices of reliability but which would at least reveal any trend that might exist. Without describing these methods or summarizing his results, it will suffice to say that in general they show a considerable degree of consistency. The percentages of full agreement tend to fall between 60% and 70%. The correlation coefficients tend to fall between .6 and .9, and the coefficients of contingency at about .7 or .8 with, however, a good deal of variability.

One of his general analyses is presented in Table No. 11. It shows the degree of differentiation obtained for the entire group which he studied. Comparison of the operating and control groups shows the reliability of the table. As Vold states, a final test of the value of the prediction tables will be a comparison of their prophecies with the actual behavior of another selected group during a sufficient parole period.

Section 3. Critical Summary.

We have now completed our survey of researches in treatment. We shall here present a comprehensive evaluation of them. That these investigations give us no knowledge of either the deterrent or the reformative effects of any mode or variety of treatment must be perfectly clear from an inspection of the researches themselves. We shall, therefore, confine ourselves to a criticism of the validity of the data and of the ability of the findings to answer the specific questions directing the research.

The validity of the data employed in the first four groups of researches depends upon the accuracy and reliability of crime rates and rates of recidivism. Crime rates are notoriously inaccurate and unreliable as an index either of all crime or of specific crimes.⁶² The procedure by which the number of crimes is ascertained varies from community to community and from time to time. A crime index may be based either upon the number of crimes known to the police, or the number of arrests made, or the

⁶²But crime rates need not be unreliable. See the analysis by T. Sellin, *The basis of a crime index*. J. Crim. Law and Criminol., 1931, 22, 335-356.

number of convictions. In addition to the unreliability of the crime rates because of the lack of uniformity in the procedures by which they are compiled, census data of this sort are inaccurate to an extent which has never been precisely determined; that is, we do not know what is the probable error of any index of the volume of crime. Variations in the personnel entrusted with the duty of recording crimes and in their policies and practices in keeping criminal records have rendered indeterminable the accuracy of crime rates as an index of crime. Moreover, crime rates do not as a rule distinguish between first and subsequent offenses so that even if they were accurate and reliable they could not be used to measure the deterrent effects of methods of treatment.⁶⁸

We must, therefore, conclude that the data which are employed in the first four groups of researches, being entirely census data based upon records of the amount of crime, are of low reliability and of indeterminate accuracy. Even were the data significant, it would be improper to use such materials as a basis for inferences and conclusions. One further criticism can be made of all the researches in the first four groups. In each case the process of treatment is involved. The process of treatment has many modes and each of these modes has subordinate varieties which may be more or less complex. Even if the data used in these researches were valid, it would be difficult to say precisely what had been studied because of the lack of definition of the treatment factor in each case. None of these researches attempts to analyze the significant features of the particular mode or variety of the mode of treatment which was studied. Such terms as imprisonment, probation, parole, etc., are ambiguous. Their meaning differs from time to time and from place to place. It is indispensable, therefore, that investigations which employ such terms restrict their meaning to the nature of the treatment factor being studied. This can only be done by a careful analysis of the treatment factor in each case.

⁶⁸We shall subsequently discuss the matter of crime records and statistics and current efforts to increase their reliability and accuracy. See Chapter IX, *infra*.

The third and fourth groups of researches attempt to compare the rates of recidivism for either different modes of treatment or different varieties of the same mode. The significance of the data employed in making such a comparison depends upon the comparability of the groups of individuals used. If the groups are not comparable in the sense that they are not homogeneous with respect to all other relevant factors, differences in the rates of recidivism for the groups being compared cannot be interpreted as differentiating the modes or varieties of treatment being compared. None of the researches we have surveyed satisfies this indispensable condition. In addition to employing invalid census data, they have failed to determine the comparability of the groups of individuals which they studied in relation to different modes or varieties of treatment.

In view of the invalidity of the data employed in the first four groups of studies, it is not necessary to discuss their statistical insignificance. Invalid data cannot, or at least should not, be subjected to statistical elaboration of any sort. The findings of these investigations must, therefore, be considered as nothing more than statistical descriptions. Their invalidity is not a statistical but an observational invalidity.

Finally we turn to the fifth group of investigations, those concerned with the differentiation of successful from unsuccessful parolees in terms of a set of human and environmental factors. These studies in parole prediction are the only investigations which merit detailed criticism. Although their technique is more elaborate, involving more complicated observational and statistical processes, and although their findings can at least be examined for their relevance to the problem of group differentiation, these studies have been inconclusive in the sense that they have not solved their specific problem. The same methodological defects which we discovered in the best work in causation, can be detected here.

In the first place, the heterogeneity of the factors upon which the prognostic scores are based makes any additive combination of them, weighted or unweighted, incomparable with any other.

This undoubtedly explains in part why Vold could get a coefficient of $+0.922$ between Burgess' unweighted and the Gluecks' weighted score for the same group. It also explains why Burgess was unable to get significantly different results when he tried various systems of weighting. This heterogeneity of the variables also makes itself felt when they are used in correlations. It is doubtful whether the techniques of multiple and partial correlation which would have to be used in order to determine the interrelation of the various factors could be applied to these materials.

Closely related to this criticism is that to which the classifications employed are subject, from the point of view of reliability and exclusiveness. Thus, it seems possible to classify the same individual under more than eight of Burgess' social types; and the Gluecks counted the factor of previous criminal record four times, although under different names, with the result that there was to that extent an *a priori* weighting of that factor.

We have pointed out that while Burgess obtained his data from prison and parole records, the Gluecks went into the pre-imprisonment and post-parole careers of their cases and studied a number of pre-imprisonment and post-parole factors. This procedure yielded results dissimilar to Burgess'. The Gluecks found that 60% of their parolees returned to criminal careers after being discharged from parole, while Burgess discovered a parole violation rate of only 28%. But when, after obtaining coefficients of association "with success", the Gluecks eliminated as insignificant those factors with low coefficients, they did not take into account the indefinite and ambiguous character of these factors and the influence that the heterogeneity of the variables of which these factors were composed and their interrelationships may have exerted on the low coefficients. As we have seen, Vold discovered that prognostic scores based upon factors with the lowest coefficients of contingency "with outcome" had predictive value almost as great as those based on the factors with the highest coefficients, and that scores based upon a combination of

factors of both kinds were superior in value to those based solely upon the factors with the highest coefficients.

In the second place, the reliability of the classifications employed in these studies is unfavorably affected by the fact that at the present time the records upon which they are based are kept for some other purpose or for no particular purpose and seldom contain the data needed for the significant classification of parolees. The data which has been employed do not permit the investigators to compute the probable error of the percentages which they employ or to determine the character of the sampling of the individuals being studied. The significance of these studies, furthermore, is seriously impaired by the failure to give precise accounts of the modes and varieties of imprisonment and parole. Thus, it is likely that any significant variation in the method of treating parolees, such as a change in the degree of the refinement of supervision, might have a considerable effect upon the instances of parole violation. In such a case, it is doubtful whether a predictive table based on data secured with respect to individuals treated by one variety of parole would be significant for individuals differently treated.

Finally, the term parole violation is not precisely enough defined. It is used to refer to the failure to report to parole officers and to other violations of parole regulations as well as to criminal behavior of all kinds, misdemeanors and felonies. Totally different findings might result from the study of success and failure on parole if failure were defined in terms of different types of parole violation.

In order to conclude the summary and criticism of researches in treatment we need only reiterate the conclusions of the previous chapters. Not only is the research in treatment not scientific but, with the exception of a few investigations, it is clearly invalid and utterly insignificant. The exceptional investigations are not conclusive but at least they show some appreciation of the methodological requirements imposed upon investigators seeking to solve certain problems.

We have seen that the literature on causation is filled with opinions about the causes of crime which can have no foundation whatsoever in the findings or conclusions of research. The literature of criminology bearing on treatment is similarly filled with proposals for alterations in the treatment process or for the institution of new kinds of treatment. Some of these are not made with a view to increasing either the deterrent or the reformatory effects of treatment; excluding these, the rest are based upon opinions which are not founded on the findings and conclusions of research. We know nothing about the deterrent or reformatory effects of any mode or variety of treatment. It is, therefore, impossible for a proposal of alterations in the modes of treatment to be defended on the ground that the proposed mode of treatment will have greater deterrent or reformatory effects. All changes in the treatment process offer opportunities for the study of their differential effects upon human behavior. Any proposal for a change in the treatment process can be justified only as an experiment.⁶⁴

⁶⁴See Chapter VIII

Chapter VII

RESEARCHES IN PREVENTION

Section 1. Preliminary Discussion: Problems and Methods.

The term prevention has both a loose and a restricted meaning. In its loose sense, it covers all devices employed by society to reduce the amount of crime. In this first sense, the modes and varieties of treatment, whether viewed in relation to potential or to actual offenders, can be considered as efforts at prevention. In its narrow sense, prevention covers all the official and non-official attempts to reduce the amount of crime, except the treatment of suspected and convicted offenders. We shall classify under the head of prevention all investigations of the effects of official and non-official preventive measures other than the treatment of offenders.

It is necessary to distinguish between empirical studies of prevention and proposals of plans and programs for prevention. In the previous chapter we surveyed and criticized researches in treatment. We did not discuss the many proposals for the modification of one or another aspect of the treatment process beyond pointing out that in the present state of our knowledge all such proposals can be supported only by opinion. So here we shall survey and criticize investigations of preventive measures which have been put into practice. We shall ignore the host of panaceas and programs which, like proposals for the modification of the treatment process, are founded upon opinions about the causes of crime which, in turn, have no foundation in knowledge of the causes of crime.¹

Very few studies have been made in this field. With the exception of one, they are all directed by a single problem. This

¹We shall elsewhere (Chapter VIII) discuss proposals for the modification of treatment and programs of prevention, with a view to analyzing them and explaining the way in which they could be set up experimentally.

problem is analogous to the problem of the deterrent effects of the treatment process. The problem of deterrence cannot be formulated at present in such a way that it can be employed either to direct or to interpret investigations. As in the case of studies supposed to be concerned with the deterrent effects of treatment, the studies which are supposed to deal with the deterrent effects of preventive agencies, answer a much more limited question. That question can be formulated as follows: What is the crime rate in a given community, contemporaneous with or subsequent to the execution of a particular preventive program in that community? It is obvious that even if the data of research answered this question, the answer would have no further significance. It certainly could not be interpreted as solving the problem of deterrence, since to interpret fluctuations in crime rates as measures of deterrence is to commit the fallacy of *post hoc ergo propter hoc*.

The few studies which we shall report are all concerned with the problem of delinquency. This fact, however, does not alter the analysis of the nature of the researches. It would make no difference if the foregoing question were formulated so as to substitute delinquency rates for crime rates.

The one exceptional study is analogous to investigations of the reformatory effects of the treatment process. It is an investigation of the effectiveness of a child guidance clinic in correcting the maladjustments of problem children. On the supposition that unreformed problem children become delinquents, this investigation of the reformatory effects of a child guidance clinic is a study of the prevention of delinquency. Precisely formulated, the investigation is an attempt to differentiate adjustable from unadjustable problem children in terms of a number of factors of which a child guidance clinic is only one. Thus viewed, it is like the attempts to predict success or failure on parole and to select the factors in terms of which a valid prognosis can be made.

With the exception of this study, all of the investigations in this field use only the census method and do not differ metho-

dologically in any way from similar studies in the field of treatment. The investigation of the reformative effects of the child guidance clinic uses the case history method in addition to the census method, and is thus similar methodologically to studies of parole prediction.

In the subsequent section we shall report and criticize the few researches which have been completed in this field. The criteria upon which we shall criticize the validity and significance of the data of research have been fully discussed in previous chapters and require no repetition here.²

There are only three groups of researches. The first and second deal with playgrounds and boys' clubs as preventive agencies. The third group contains a single investigation of child guidance clinics. We shall group these researches under the specific questions which their data are capable of answering.

Section 2. A Survey of Empirical Studies of the Prevention of Crime.

I. WHAT IS THE DELINQUENCY RATE IN A GIVEN COMMUNITY, CONTEMPORANEOUS WITH OR SUBSEQUENT TO THE EXECUTION OF A PARTICULAR PREVENTIVE PROGRAM IN THAT COMMUNITY?

(1) *Playgrounds.* Some evidence has been reported as to the effect of playgrounds on the reduction of delinquency in regions where they are established. The City Manager of Knoxville, Tennessee, claims that juvenile delinquency has decreased 50% since playgrounds were started; in Toronto, in a district of 50,000 people which sent 30% of the total of child delinquencies to the juvenile courts, delinquency was reduced to practically nil within one year of the organization of boys' groups by the Toronto Rotary Club. The probation officer in Visalia, California, claims a reduction of 80% in juvenile delinquency since the organization of the community recreation system. St. Louis reports that a comparison of the number of juvenile delinquents in the effective area of every playground in St. Louis in 1917 with the number of delinquents in 1921 in the same areas, showed a decrease of

²See Section 1, Chapter VI.

50%. New Orleans reports a decrease in juvenile delinquency since 1909 as a result of the introduction of playgrounds, although the city has increased in population over 60,000 in that period.³

Passing over mere map studies, we come to Truxal⁴ who has made an extensive study of the relation between juvenile delinquency and playgrounds in Manhattan. He divided Manhattan into 28 play districts, embracing the area of effectiveness of a playground (which evidence seemed to substantiate as a circle of a quarter-mile radius), bounded, wherever possible, by thoroughfares (which children generally would not cross to reach a play area), reasonably uniform for racial composition and including integral sanitary districts. For each district he computed a delinquency index which was the number of arrests divided by the total number of children, multiplied by 1,000. He then ascertained for each district the adequacy of play-space index by dividing the actual play-space by the needed play-space.⁵ He obtained a rank order correlation of + .44, which is subject to a high probable error because of the small number of cases. However, Truxal points out that this computation does not take into account districts which have parks, but no supervised play areas. He also tested this correlation by holding racial composition, child density and police regulation (represented by the tendency not to arrest for lesser offenses in certain districts) constant. He concludes, from the evidence gathered, "that a certain amount of association between recreation areas and juvenile delinquency appears to exist. This is quite a different statement, however, from one which would assign to the presence of recreation spaces the controlling factor in the prevention of delinquency".⁶ His further remarks are of interest because of their critical bearing on the study of prevention. "We should look with considerable skepticism," he writes, "on any easy generalization which would

³L. F. Hanmer, Relation of public recreation to delinquency. Proceedings 58th Annual Congress, American Prison Association, 1928, pp. 311-312.

⁴Outdoor recreation legislation and its effectiveness. New York. Ph.D. Thesis, Columbia University, 1929.

⁵Computed on a norm of 300 square feet per child and on the assumption that no more than 25% of the children would want to use the playground at the same time

⁶*Op. cit.*, p. 165

assign to this one environmental factor, viz., recreation spaces, the predominating influence on the control of delinquency. In the second place we should be able to say that there appears to be a moderate association between the presence of recreation areas and the absence of juvenile delinquency, provided we have taken into account a sufficient number of environmental influences."⁷

(2) *Boys' Clubs*. We have a few items of information about the preventive effects of boys' clubs. The Union League Club of Chicago organized a boys' club in a district distinguished by its high rate of delinquency.⁸ Within a short period of time juvenile delinquency in this police precinct actually decreased 81% while the decrease for the city as a whole during the same period was relatively small. The same criticism can be made of this study as was made of evidence of the success or failure of the juvenile court. It is not fair to conclude from these figures, as did the chief of police in Chicago, that "if there was a boys' club in every precinct, juvenile delinquency would be reduced to a minimum". As Dr. Thomas⁹ points out, a closer examination of what actually happened shows not so much a reduction of delinquency as a change in policy on the part of the police. Of approximately 18,000 boys whose delinquencies came to the attention of the police in 1926, only 1,430 were taken before a juvenile court; that is, the police may use discretion and release delinquents on parole to their families in a large proportion of the cases. It would, therefore, be very natural that the police of this precinct should use their discretion at this point and parole a large number of the boys to the Club. Thus the policy of the police can make the crime rate appear to be almost anything. If in 1926 the police of Chicago had adopted the Boston plan of taking practically every case to court, it might have appeared that boy delinquency had increased more than 1000%.

⁷*Op. cit.*, pp. 165-166.

⁸F. M. Thrasher, *The gang*. Chicago: University of Chicago Press, 1927, pp. 520-524.

⁹Report to Columbia Criminological Survey, Part 2, Section 13, pp. 17-18.

The Norwich (England) Lads' Club is a boys' club organized and run by the Norwich Police Department.¹⁰ As evidence of its value, the following figures are cited: in November, 1917, a year before the organization of the Club, 55 boys from Norwich appeared before the Juvenile Court, and 66 boys from Norwich were in correctional institutions. In the year 1926, after the Club had been in operation for some time, only 18 boys appeared in the Juvenile Court and only 30 were in correctional institutions.

The Boys' Club of Worcester, Mass., makes a similar claim for its preventive efficacy with respect to delinquency.¹¹ In the year between June 1, 1925, and June 1, 1926, of 900 boys apprehended by the police for delinquency or crime, only 34 were members of the Boys' Club. If we take boys of fourteen years of age, 50% of which age group were members of the Club, we find that only 8% of 86 cases of delinquency were members of the Club. The significance of this report cannot be estimated in the absence of much more data, particularly as to the comparability of the groups compared in all respects other than membership in the Boys' Club.

An organized and controlled study for the purpose of measuring the influence of a boys' club in a given region on its members and on the neighborhood, is now being carried on at New York University under the direction of Frederick M. Thrasher. No results have yet been published. This project is much more elaborate than anything yet attempted in the way of measuring the preventive efficacy of some social agency or institution. Whether or not it will yield significant and reliable results will depend upon the same methodological considerations which we have already examined in detail in our discussion of research in the fields of causation and treatment.

¹⁰The Chief Constable's Annual Report to the Watch Committees of the City and County Borough of Norwich, 1926, cited in Harrison, *Undermining crime*, Chapter 3, p. 11

¹¹Pamphlet issued by Worcester Boys' Club

II. CAN THE SUCCESS OR FAILURE IN THE ADJUSTMENT OF PROBLEM CHILDREN BE PREDICTED IN TERMS OF A NUMBER OF FACTORS, OF WHICH PSYCHIATRIC TREATMENT IS ONLY ONE?

Child Guidance Clinics. A five-year experiment was undertaken by the Bureau of Child Guidance, and the preventive value of their work has been estimated by Porter Lee, the director of the New York School of Social Work.¹² The experiment was designed to test the effects of submitting a group of selected children to treatment by a staff of psychiatric social workers. 822 children were accepted at the Bureau for study; of these, for one reason or another, only 591 were carried through for a period long enough to permit reasonably adequate treatment. The cases upon which the evaluation is based are therefore those in which the treatment was given the fullest opportunity for effective results. The objective of the Bureau in each of the 591 cases could be stated as the emotional adjustment of the child through better understanding of his problems. The evaluation of this treatment required a classification of cases according as they resulted in successful adjustment, partially successful adjustment or complete failure. The difficulties in making a uniformly reliable diagnosis of success and failure must be considered as one of the chief sources of error in the statistical handling of the data. The data consisted of three separate records: (1) the case records themselves which were unusually complete; (2) certain diagnostic and progress records which were kept currently in the treatment of the cases, and recorded briefly the problems defined by the staff, the treatment undertaken and the progress or lack of progress noted; (3) a special analysis in which all of the data regarding the patient and his environment were classified so as to indicate whether each item in his history seemed to have either a favorable or an unfavorable significance in the problem of his adjustment. This extremely detailed study was made of only 196 cases, and in the light of these data the cases were classified by the entire staff as success, partial success, or failure. Vari-

¹²An experiment in the evaluation of social case work Proc. Am Stat Assn,

ous efforts were also made to check the reliability and the accuracy of the diagnosis by judgment obtained from parents. The family appraisal was then compared with the staff appraisal.

The result of the staff appraisal in 196 cases carried through the treatment period was as follows:

Success	93	48%
Partial success	61	31%
Failure	42	21%
	196	100%

In 61 cases the staff and family appraisals were compared in order to classify the individuals. The results of this study were:

		PARENT'S RATING			
		Success	Partial Success	Failure	Total
STAFF RATING	Success	23	7	3	33
	Partial success	11	9	..	20
	Failure .....	..	5	3	8
	—	—	—	—	—
	Total	34	21	6	61

This study can be criticized in the following terms: First, the process whereby the cases which were evaluated were selected, was such that a greater proportion of success would be expected than in the general run of cases coming into a clinic. Second, as Lee himself points out, the evaluation was made "by a group which did the work, and the group which had the greatest stake in the results of the whole experiment. The parent's judgment of the children's progress was made by the group having the greatest stake in the child himself . . . (and) was interpreted by another person."¹⁸ The figures are therefore somewhat invalidated

¹⁸*Op. cit.*, p. 173.

by the inevitable partiality of the parties making the judgments. Under such circumstances, the degree of success obtained must be considered surprisingly small. In the third place, the proportion of success shown in a study of this kind is not necessarily attributable to the agency under consideration. "No 'control group' was studied, i.e., no attempt was made to discover how great a proportion of children having the same difficulties as the children in this group and subject to approximately the same influences with the sole exception of psychiatric case treatment, would make 'successful' adjustments. Until such a study with a control group is made, the most that can be said for such an evaluation as this is that it shows the proportion of successes occurring coincidentally with, but not necessarily attributable to, certain specific sorts of treatment.

"This experiment is further evidence of the complexity of the 'adjustment' process, and of the difficulty of interpreting the value of any particular approach. Certainly the psychiatric approach is far from being the panacea that its more ardent and less objective advocates have claimed."¹⁴

This study is an illustration of a program to prevent crime by preventing the problem child from becoming a juvenile delinquent, just as the work of the juvenile court is a program for preventing the juvenile delinquent from becoming an adult offender.

Section 3. Critical Summary.

The foregoing researches yield data which are neither valid nor significant. We have already criticized the inaccuracy and unreliability of the crime or delinquency rates which all but one of these investigations employ. The data achieved by the case history method in that one case are clearly unreliable and have no determinate validity.

But even if the data collected by these researches were valid, they would be insignificant. Although the first two groups of researches do answer a specific question, this answer affords no

¹⁴Thomas, Report to Columbia Criminological Survey, Part 2, Section 12, p. 7.

basis for any conclusion whatsoever about the effects of the preventive measures studied. Their lack of etiological significance is to be explained as in the case of that of the studies supposed to be about the deterrent effects of the treatment process. It is unnecessary to repeat the analysis.

The data of the third study are both inconclusive and insignificant. The data not only are inconclusive, but fail to give a definite answer to the question directing the research. Even if the answer were given it would have little etiological significance because of the inadequate analysis of the set of variables and the utterly incompetent statistical treatment of the data.

We must therefore conclude that we have no knowledge about the effects of any preventive program or measure. In striking contrast to this total lack of knowledge is the vast number of proposals and panaceas for prevention which have been advanced. In the next chapter we shall analyze these proposals, along with recommendations for modifications of the treatment of offenders, and consider how the practical man should regard them.

Chapter VIII

THE CONTROL OF CRIME BY TRIAL AND ERROR

Section 1. The Problem of the Control of Crime.

By the prevention or control of crime can be meant either the reduction of the amount of crime in, or the elimination of all crime from, a given community. Whether or not the second goal is attainable is a question we shall reserve for later discussion; most programs of crime prevention can be considered in relation to the first objective, namely, the diminution of the volume of crime. By the diminution of crime is meant the reduction either of the volume of all crime or of specific kinds of criminal behavior. The limit of reduction is, of course, elimination. The elimination of a specific kind of criminal behavior may be possible, even if the elimination of all crime may not be. It is important to note, however, that the reduction in the amount of, or the elimination of, a specific kind of crime is not necessarily accompanied by a diminution in the volume of all crime.

Society can proceed in its effort to control crime in three ways. In the first place, since the criminal law is the formal cause of crime,¹ alterations in the behavior content of the criminal law may result in a reduction of crime. In the second place, in so far as the treatment process has any deterrent or reformative effect upon the behavior of potential and actual offenders, the treatment of offenders will result in the reduction of crime. And in the third place, there are all the official and unofficial devices, other than the treatment of offenders, which are contrived and applied as preventive measures. We shall subsequently discuss the criminal law and criminal legislation in relation to the problem of controlling crime.²

¹See p. 5, *supra*.

²See Chapter XI.

In this chapter we shall confine ourselves to an analysis of practical programs in the fields which have already been arbitrarily designated as those of treatment and prevention.

We have previously defined the nature of a practical problem.³ It always involves a choice between alternative courses of action and requires a decision to be made. Thus, the control of crime presents itself as a practical problem in the form of a question which asks whether we shall undertake this or that course of action in an effort to prevent crime. There have been many proposals for the modification of the treatment process, proposals to eliminate or modify existing modes of treatment or to institute new modes of treatment. Each of these proposals engenders a practical problem, to which the continuance of existing modes of treatment unmodified must be viewed as an answer. Their continuance without alteration constitutes a choice between the alternatives of continuing to treat suspected or convicted criminals in certain ways and of somehow modifying that procedure. Similarly, there have been many proposals that this or that program be undertaken as a preventive measure. Each of these proposals raises a practical problem by requiring a decision as to the relative advantages of engaging or not engaging in the suggested program.

Every practical problem of this sort involves the question of the adaptation of means to end. Unless purposeless, a given mode of treatment is employed as a means to the end of punishment or incapacitation or reformation or deterrence or some other.⁴ Similarly, every proposed modification of the treatment process is offered as a means to one or another of these same ends. The problem is usually, if not always, regarded as involving a choice among alternative means for accomplishing the same end. But with respect to preventive measures, proposed as means for controlling criminal behavior, the question is whether or not a specific measure which has been proposed as a device to prevent crime is in fact a means to that end and, if so, what is the degree

³See Chapter II.

⁴See Chapter III, Section 3.

of its efficiency. A similar question can be asked with respect to every mode of treatment, existing or proposed. That it is usually not asked indicates that it is assumed that modes of treatment are adapted to their ends, and that proposals for the alteration of the treatment process raise only questions of their relative efficiency. This is particularly true with respect to modes of treatment which are urged as means for reforming actual and deterring potential offenders. It is almost always assumed by those who put them forward that they are adapted to the ends of reformation and deterrence; but, as we have seen, this assumption is an opinion which has no basis in knowledge of the reformatory and deterrent effects of modes of treating offenders.

The question whether any mode of treatment or any preventive measure, existing or proposed, is a means to a given end, cannot be answered without knowledge which is etiological in form.⁵ The question as to the relative efficiency of two or more means can likewise be answered only by research. In the three preceding chapters we have examined the empirical studies in causation, treatment and prevention, and we have found that they have yielded no knowledge of the causes of criminal behavior. This means that we have no knowledge of the influence of any mode of treatment, existing or proposed, upon the behavior of actual and potential offenders. We do not know whether or to what degree any mode of treatment possesses reformatory or deterrent efficacy. It also means that we do not know whether or to what degree any preventive program, existing or proposed, is efficient as a preventive device.

In brief, we lack the knowledge which is essential to the solution of the most important of all the practical problems of crime, the problem of controlling criminal behavior, and we shall

⁵If the end of a given mode of treatment is not reformation or deterrence, but punishment or incapacitation or any other, the question of efficiency either is unanswerable, at the present time at least, as in the case of punishment, or can be answered in terms of descriptive knowledge which can be obtained with greater or less difficulty, as in the case of such ends as a financial economy and the satisfaction of popular attitudes toward the treatment of offenders. In this chapter we shall be concerned with modes of treatment only in relation to the ends of reformation and deterrence.

continue impotent to control crime until a science of criminology is developed.⁸ Of the urgency and critical character of this problem there can be no doubt. Its urgency and critical character is, in the absence of knowledge, the only justification for the many current proposals for alteration of the treatment process and the somewhat less numerous proposals of preventive programs, which are put forward with such naïve faith by their sponsors. One need only read the bewildering array of current proposals for the modification of the treatment process in the light of our discussion of criminological research in order to see how utterly they lack foundation in knowledge and to appreciate the state of perplexity in which legislators must find themselves when asked to enact opinions of this character into laws.

We do not wish to be misunderstood. We do not mean to say that until knowledge is perfect and complete we should make no efforts to reform actual offenders or to deter potential offenders or otherwise to prevent crime. In the absence of knowledge we must proceed as intelligently as we can in the only way in which we can, namely, by the process of trial and error, but we should realize what we are doing. We should recognize the difference between the process of trial and error as a method of attempting to solve practical problems and a genuine technology which rests upon knowledge of the means-end relation. Unfortunately, the uncertain and tentative character of existing and proposed methods of treating offenders and of preventing crime has been concealed by the introduction of opinions about their efficiency as if they were knowledge. Only harm can result from such self-deception. We should recognize that we proceed by trial and

⁸It should be obvious that compared to the problem of controlling criminal behavior all other problems of crime are relatively insignificant. For example, we can say that in relation to its administrative ends (See Chapter III, Section 5), the administration of the criminal law would be perfectly efficient if all persons who commit crimes, but no others, were convicted and treated by one of the modes prescribed by the treatment content of the criminal law. This constitutes the major problem of administrative efficiency in the field of criminal justice. Now, if the result of the treatment of criminals is to increase rather than to diminish the volume of crime, a matter about which we again have no knowledge, the more efficiently we administer the criminal law the more crime we will have. From this point of view, it would seem much more important to attempt to gain knowledge about criminal behavior than to attempt to make the administration of the criminal law more efficient.

error only because we lack knowledge, and we should regard whatever we do as part of an experiment to gain knowledge, even though for the present we shall be unable, as we have seen, to discover the efficiency of the means which we employ to control criminal behavior.⁷ Otherwise we may fail to try to obtain the knowledge which we so urgently need.

Furthermore, we should be keenly aware of the limitations of the process of trial and error in the control of crime. As we have said, trial and error is the only way in which we can attempt to solve practical problems in the absence of knowledge.⁸ As the situations from which practical problems emerge and the phenomena with which they are concerned become more and more complex, it becomes increasingly difficult for us both to make valid observations and to interpret what we observe by common sense generalizations. This is the predicament in which we find ourselves with respect to the very complex practical problems involved in the control of criminal behavior: common sense is unable to discover the causes of crime. Hence, until we obtain scientific knowledge of the etiology of criminal behavior, we can attempt to control crime neither by a genuine technology nor by procedures resting upon common sense knowledge, but only by a process of trial and error.

The tremendous complexity of the phenomena of criminal behavior is apparent from our discussion of what is involved in ascertaining its causes, or, indeed, in the less difficult enterprise of differentiating criminals from non-criminals. Common sense can never succeed in discovering the causes of crime or even in differentiating criminals from non-criminals in terms of some set of human and environmental factors. At the most, we can, and do, observe some of the characteristics of criminals and their environments, and thus form opinions about the 'causes' of crime. These opinions are reflected in all of the numerous proposals for the alteration of the treatment process and for the modification of programs of crime prevention. It is obvious that

⁷The insignificance of the researches in treatment and prevention, discussed in Chapters VI and VII, makes this clear.

⁸See Chapter II.

at their best they can be no more than guesses which may be right but which are as likely, if not more likely, to be wrong. It is equally plain that if the means which we contrive on the basis of such opinions for controlling criminal behavior are in fact adapted to our purpose, it will be by chance.

We do not seek to minimize the rôle which chance can play in practical affairs, but only to emphasize the fortuitous and undependable character of such success as we may achieve by the process of trial and error in attempts to solve practical problems as complex as that of controlling criminal behavior. If by chance we succeed in controlling crime to any extent, we will be unable to explain our success and, hence, to repeat it except again by chance. It is desirable that crime should be prevented and prevention is none the less desirable for being accidental. However, it is not desirable that we should deceive ourselves about what we are doing. If we practice self-deception we shall fail to appreciate how ignorant we are and to realize that efforts to develop a science of criminology are of greater practical importance than immediate efforts at crime control. Preoccupation with urgent practical problems too often leads the practical man into impracticality. As a result, he unwisely shuts his eyes to the importance of research or insists that research shall be undertaken with his practical problems immediately in view. It is as a result of such insistence that a great part of criminological research has been promoted and undertaken. The insignificance of the knowledge which such research has yielded and its inutility in practice indicate that scientific research cannot be fruitfully directed toward the solution of immediate practical problems except in those fields in which there exist highly developed empirical sciences.

In the remainder of this chapter we shall summarize and criticize the modifications of the treatment process and the programs of prevention which have been proposed. We shall view these as proposed solutions of practical problems. We shall criticize them in the light of our ignorance of the causes of crime and of the effects of the modes of treatment and the preventive devices which

we now employ. In this way, we shall exhibit each of these proposals as being based upon an opinion with so little evidence to support it that it can be defended only (1) as a trial and error attempt at chance success or (2) as an experimental project which, of course, cannot be properly undertaken in the absence of a science of criminology to furnish the theory and the knowledge by which experiments must be directed.

Section 2. Proposals for the Modification of the Treatment Process.

If the treatment process is viewed in relation to criminal behavior, its ends are the deterrence of the potential offender and the reformation of the actual offender. Deterrence and reformation are merely two aspects of the same thing, namely, the influence which the treatment of offenders may exert to prevent crime. Nevertheless, the influence of treatment upon individuals who have never offended and upon those who have, may be different; and it is for this reason that throughout this discussion we have separated deterrence and reformation.

Our desire to reform actual offenders and at the same time to deter potential offenders presents a serious difficulty in the evaluation of a mode of treatment as a preventive device. It is possible that any mode of treatment may have a value as a deterrent greater or less than, or the same as, the value which it possesses as a reformative. There are thus alternatives of policy to be considered. If the control of crime is our goal, perhaps treatment should be planned with a view primarily to deterrence rather than to reformation, or vice versa. Unfortunately, we have no knowledge to enable us to answer any of these questions or to guide us in considering these alternatives of policy. We do not know what attributes a mode of treatment must have in order to exert either the desired deterrent or the desired reformative effect. We do not know what attributes a mode of treatment must have if it is to achieve a happy combination of both deterrent and reformative effects. We do not know whether any proposed method of treatment which may be justified in

terms of its possible reformative effect, will or will not result in diminished deterrence.

Proposals for the modification of the pre-conviction processes of criminal justice can, however, be considered primarily in relation to the end of deterrence. These proposals fall into two groups. The first aims at increasing the efficiency of the administration of the criminal law, the efficiency of police, prosecuting and judicial agencies.⁹ It is assumed that increased efficiency in the administration of the criminal law is a means to deterrence; that is, that if the police were more successful in detecting crimes and in identifying and apprehending criminals, and if the agencies of prosecution were more successful in convicting criminals, fewer crimes would be committed. This assumption often expresses itself in the opinion that the certain and speedy conviction of criminals has value as a deterrent. This is merely an opinion; we have absolutely no knowledge upon which to base the judgment that celerity and certainty in the apprehension and conviction of criminals have deterrent efficacy. To put this more precisely, we do not know what is the relation between deterrence and various degrees of certainty and celerity. We do not know with what other factors these factors must cooperate in order to deter potential offenders, if they do. In short, these proposals for the modification of the pre-conviction processes of criminal justice for the purpose of increasing their value as deterrents cannot be advanced as anything except guesses.

The second group aims at changes in what we have called the pre-conviction treatment of offenders. Here there are such questions as whether specific police practices, such as the third degree or the routine of the police courts, or the characteristics of jails in which persons accused of crime are temporarily detained, exert a positive or a negative influence upon potential offenders. Similarly, the use of psychological apparatus and techniques and the examination of accused offenders before a magistrate have been proposed as substitutes for the third degree.

⁹We shall discuss the knowledge upon which these proposals rest in Chapters IX and X.

We are utterly ignorant of what the adoption of any of these proposals would mean in terms of criminal behavior. We do not know whether pre-conviction treatment would then have greater or less or the same inciting or inhibiting effect upon the behavior of persons charged with crime. It is irrelevant to defend such proposals by reference to the greater humanity of the proposed methods or to any other end, if the end under consideration is that of influencing the behavior of potential offenders. Similar comment can be made upon the proposal that psychiatrists be attached to courts to assist judges in determining how felons should be treated, and upon the proposal that the function of sentencing convicted persons be taken away from the judges and vested in an administrative board composed of criminologists, psychiatrists and other experts.

We shall now turn to proposals for the modification of the post-conviction treatment of offenders. Here we must consider both the end of deterrence and the end of reformation, and must remember that one and the same mode of treatment may serve these two ends quite differently.

Our survey of the researches in treatment has revealed that we do not possess any knowledge of either the deterrent or the reformative effects of any mode of post-conviction treatment, existing or proposed. We have already referred to the perplexity of an intelligent legislator who would attempt to devise a system of post-conviction treatment with a view to deterrence and reformation, a perplexity which arises out of the large number and wide variety of the modes of treatment, existing and proposed, about the deterrent and reformative values of which we have no knowledge.¹⁰ We can illustrate the bewildering array of alternatives which he has, by reference to variations in imprisonment which are practised or proposed. Thus, there are the indeterminate sentence; the specialization of prisons for various classes of offenders, juveniles, women, the insane, the mentally defective, the negro, alcoholics and so on; progressive liberation from im-

¹⁰An incomplete enumeration of existing and proposed methods of post-conviction treatment, without any description of them, would fill about twenty-five printed pages of this size.

prisonment, involving prisons of three types, the sifting or study, the intermediate, and the discharge prisons; the individualized treatment of offenders, a term which comprehends a vast number of proposals such as the classification of offenders, the specialization of penal and correctional institutions, the extension of psychiatric, psychoanalytic and other psychological facilities, the use of social workers, personnel officers and so on; improved and enlarged medical service and psychotherapy; occupational and recreational therapy; abolition of life imprisonment; preventive detention; innovations in the social and political life of prisoners, such as compulsory gymnastics, music, better libraries, reading rooms, etc.; self-government; diminution of the horrors of prison life by improvements in prison diet, better sanitation, reduction of the monotony of prison life, and so on; innovations of many sorts in prison labor and in prison architecture; installment imprisonment; changes in prison personnel and administration; and so on, almost *ad infinitum*.

In so far as any of these varieties of imprisonment are practiced or proposed with deterrence or reformation as the end in view, they cannot be justified on the grounds of any knowledge whatsoever. There is no doubt that the sponsors of this or that variation in the treatment process believe that it will be highly efficacious in reducing the volume of crime, but in no case is there a clear ground for such a belief. By a clear ground we mean unequivocally definite and valid empirical knowledge.

It is unfortunate that where action is so urgent it must be undertaken without sufficient knowledge. It is probably for this reason that so many changes in treatment have been undertaken or proposed without any knowledge that they are or would be better than previous practices. The sponsors of variations in treatment have been able to advance arguments for their proposals which superficially appear to be based upon knowledge. However, as soon as one distinguishes sharply between theory and conjecture and between knowledge and opinion, it becomes clear that such arguments are specious. The justification for any change in treatment is, as we have said, not that knowledge

warrants the belief in the greater efficiency of the new method, but rather that our ignorance and the exigent character of our practical problem warrant our proceeding more or less blindly.

If, therefore, the administrator and the legislator are interested in the reformative and deterrent values of treatment, they should be advised that from that point of view every method of treatment, existing and proposed, should be regarded as part of an experiment. To consider methods of treatment in that light will tend to do away with the empty discussions which they engender, the *pros* and *cons* of which are equally opinionative and conjectural. Furthermore, if the administrator and the legislator view methods of treatment as experiments, they will be inclined both to aid empirical studies of their causal efficacy and to seek the aid of responsible scientists in carrying out experiments which they themselves initiate, if and when, in time, such experiments are possible. If a *rapprochement* of this sort could be established between legislators, administrators and investigators in the field of treatment, it would do more than anything else to further our knowledge of the effects of treatment, and thus make it probable that definite and reliable knowledge will more quickly be available for the guidance of legislators and administrators in their practical affairs.

Section 3. Proposed Plans and Programs for the Prevention of Crime.

In order briefly to summarize the various proposals which have been made in the interest of crime prevention we have grouped them by reference to the factor or factors which are supposed to be responsible, in part at least, for criminal behavior. Although we have no knowledge of the causal influence of any factor upon criminal behavior, each of these proposed plans to reduce the amount of crime in a community is based upon the supposition that some factor is etiologically significant. We, therefore, refer in the case of each of these proposals to the various sections of the chapter on causation in which the researches concerning these factors are summarized and criticized.

(1) *Prevention by control of the factors of heredity.*¹¹ These include whatever inheritable mental or physical traits are supposed to be causally related to criminal behavior. These factors are to be exterminated by interfering with their transmission. The usual technique of control suggested is some form of sterilization either by surgery or segregation. Eugenic programs are similarly directed toward the improvement of the human breed.

(2) *Prevention by the control of the factors of physical and mental defect.*¹² It is here proposed that prevention be achieved by the elimination or amelioration of various physical and mental deficiencies. Segregation and training are suggested as means to this end. By segregation individuals who are supposed to have criminal propensities are to be incapacitated from committing crimes. By training it is supposed that these criminal propensities can be modified and rendered innocuous. The most specific proposal which has been made in this connection is based upon the recognition of different kinds of intelligence and the fact that the feeble-minded often have mechanical abilities which can be vocationally trained and guided. Military training has also been recommended for its disciplinary value.

(3) *Prevention by control of the factors of mental abnormality other than feeble-mindedness*¹³ Here we have what is probably the largest group of programs, psychiatric ped-analysis, child guidance clinics and public school measures for dealing with the problem child. Under the head of abnormalities are included all sorts of maladjustment, from that of the problem child and the juvenile psychopath to that of the adult neurotic and psychotic. The preventive idea is throughout the same. It assumes that mental abnormality is a cause of criminal activity. Since the hope is to prevent crime by reducing the amount of abnormality in the community, these preventive programs must not be confused with the various proposals of psychiatrists that the abnormal offender be reformed by some kind of psychotherapy.

¹¹See p. 107, ff.

¹²See p. 108, ff.

¹³See p. 119, ff.

We are here dealing with the potential rather than the actual offender. But since the delinquent is a potential criminal, just as the problem child is a potential delinquent, there is some overlapping of the ends of deterrence and reformation.

(4) *Prevention by control of economic conditions.*¹⁴ The assumption here is that poverty and the immediate consequences of poverty, such as idleness, distasteful occupation, ill health, bad living conditions, etc., are among the causes of crime and should therefore be eradicated. Sometimes the preventive program is not to eradicate poverty but to alleviate the economic and social condition of the less fortunate groups of society.¹⁵

(5) *Prevention by control of domestic factors.*¹⁶ Here the steps which have been proposed are directed either toward removing the child from an irremediably poor home environment or toward improving the home environment. This is largely the field of the social worker and the visiting teacher. The placement of the child in homes as opposed to his commitment to institutions is one of the devices which has been tried in recent years. It is assumed that the deterioration and disorganization of family life is a cause of crime; hence, it is proposed that the school or some other social agency help to prevent crime by taking over the unfulfilled function of the family in the moral and social training of the child.

(6) *Prevention through social reorganization.*¹⁷ We have here all of the schemes for altering the fundamental structure of society in such a way that the social causes of crime will be controlled. These range from fascism at one extreme to socialism and communism at the other.

(7) *Prevention by the control of inciting information.*¹⁸ The motion picture, the press, the novel, are supposed to be causes of

¹⁴See p. 129, ff.

¹⁵The most numerous of these are salvational schemes involving in some way or other the reconstruction of society. These are discussed below.

¹⁶See p. 126, ff.

¹⁷There are no quantitative studies.

¹⁸There are no quantitative studies.

crime, and it has therefore been suggested that censorship would be a preventive of crime. On the side of strengthening the inhibiting factors, it has been suggested that properly instructive and educative motion pictures, fiction, etc., be substituted for the kind which makes crime seem a glorious and lucrative profession.

(8) *Prevention by the control of alcoholic beverages and drugs.*¹⁹ The assumption here is that each of these substances is responsible to a greater or less degree for criminal behavior, both that involved in infractions of the laws prohibiting the use of such substances, and other criminal conduct. The prohibitive laws themselves, such as the Anti-Narcotic Law and the National Prohibition Act, have proved highly inefficient to prevent the conduct which they prohibit, and educational work tending toward the eradication of the evils of drug addiction and intemperance has been recommended in their stead. Another proposed preventive measure is the remedial measure of curing the alcoholic or the drug addict. Researches under this general head should be grounded on more adequate knowledge of physiological effects and should be freed from the propagandist basis underlying so many of the current researches.

(9) *Prevention by means of school and church.*²⁰ Here, in general, we have all the plans for eliminating from the school as an institution those aspects which tend toward maladjustment and thus toward criminal activity; and, on the other hand, proposed alterations in the school system to make it a more effective agency of moral education, character training and child guidance. It has been sought to effect the transformation of the school into a behavior training organization rather than an instrument of formal education by the introduction of psychiatric and mental hygiene services and the visiting teacher for dealing with problem children. The school is also making an effort to organize the child's athletic and artistic responses, etc., and, in general, to carry on the work that the home and the church to some extent are failing to perform in modern society.

¹⁹See p. 132, ff.

²⁰There are no quantitative studies.

(10) *Prevention by control of the physical and social characteristics of the community.*²¹ Under this rubric, we have such plans as those seeking the elimination of boys' gangs, undirected street play, etc., by the introduction into the community of playgrounds, settlement houses, boys' clubs, etc. The eradication of the obnoxious characteristics of a community and the substitution of more beneficial features have elicited a considerable degree of interest and the bulk of the researches which have been done in the sphere of crime prevention.²²

All of the foregoing programs in prevention are subject to the criticisms we have already made of proposed modifications of the treatment process. In almost every case they are advanced by their sponsors as if they were clearly based upon knowledge. They have, of course, no such foundation. They are rather based upon opinions which are hazarded in the absence of knowledge because of urgent practical needs. Furthermore, these programs are for the most part extremely simple-minded. They completely ignore the complexity of the etiology of human behavior. They seem to suppose that, by removing or introducing this or that single factor, the causal nexus will be radically changed. Not only is the plurality of causes disregarded but their interrelationship as well. Causal factors cannot be added to or subtracted from a causal complex as so many separate items.

These proposals for the prevention of crime, like proposals for the modification of the treatment process, must therefore be viewed either as trial and error projects or as experimental undertakings for the sake of increasing our knowledge of the causes of crime. As we have said before, it is doubtful whether experimental work can be planned and executed in the present state of criminology. At any rate, it is important to recognize that if the opinions upon which these plans are based are treated as *if they were knowledge*, the actual practice of prevention becomes unenlightened and uncritical and the possible

²¹See p. 138, ff.

²²We have already summarized and criticized these. See Chapter VII.

future usefulness of preventive activities as experiments in criminology is seriously impaired.

Section 4. Conclusion: The Inevitability of Crime.

The problem of the control of crime, either by treatment or prevention, raises what is probably the most fundamental question which can be asked about crime. We have previously distinguished two possible goals of efforts to control crime: (1) the elimination of all crime from the community; and (2) a reduction of the amount of crime in the community. We postponed the consideration of the first of these two objectives. We must now raise the question as to whether it is or is not attainable. A practical plan is worthy of consideration only if it is practicable and if its objective is attainable. It is, therefore, important to recognize that the understanding which we have of human nature and human society implies the inevitability of crime and the impossibility of its total elimination.

In the first place, crime is a symptom of the imperfection of human society. In the second place, crime is a symptom of the imperfection of the human being as a social agent. These two imperfections are aspects of the same thing, the incompatibility of the sum total of human impulses with the demands of any constituted society. To view the complete elimination of crime as a goal which man can achieve is to believe that human perfection and the perfection of human society are capable of being realized. While the hope for perfection is in itself admirable, the recognition of the limitation of human powers to achieve perfection is essential to the wisdom and humility without which attempts to solve the problems of crime must be misguided.

PART THREE

CRIMINAL JUSTICE

Chapter IX

RESEARCHES IN THE ADMINISTRATION OF THE CRIMINAL LAW

Section 1. Preliminary Discussion: Problems and Methods.

The administration of the criminal law is a practical activity.¹ Like most practical activities, it is executed with some measure of efficiency less than perfection. But the inefficiency of criminal justice is commonly thought to be greater than it need be.² The efficiency of criminal justice is not measured against the standard of absolute perfection, but against some standard which is thought to be attainable and which we desire to attain.³ The problems of criminal justice which we shall consider in this chapter and which we shall call administrative problems, have their origin in the recognition of the varying degrees of efficiency with which the criminal law can be enforced.⁴

¹We shall use the phrase 'criminal justice' as an abbreviation for the phrase 'the administration of the criminal law'. The elements of criminal justice are the criminal law and its enforcement. In this chapter we shall be concerned with problems arising out of the enforcement of the criminal law, in Chapter XI we shall be concerned with the criminal law apart from its administration.

²The well known dictum of the late Chief Justice Taft, uttered in 1908, that the administration of the criminal law in America is a disgrace to civilization, probably does not express too strongly current opinions regarding the inefficiency with which the criminal law is today administered in this country.

³This standard is indeterminate. Inefficiency is any degree of efficiency less than perfect efficiency. But we may well doubt that perfect efficiency in the enforcement of the criminal law is attainable. This is a matter to which we shall recur. We may also doubt that we desire that the criminal law should be enforced with the highest possible degree of efficiency, if for no other reason than that we have so long tolerated what we believe to be less.

⁴It is obvious that anyone who is satisfied with the degree of efficiency at present achieved by criminal justice will recognize no practical problems of an administrative sort.

Practical administrative problems are all concerned with increasing the efficiency of the processes of criminal justice. In so far as knowledge can be used to make the administration of the criminal law more efficient, these practical problems have theoretical aspects. But administrative problems are primarily practical in the sense that our first interest in criminal justice is in its efficiency as a practical activity. We must and can administer the criminal law whether or not we have knowledge of the conditions of its efficiency.⁵

It is necessary here briefly to distinguish between the problems of criminal justice and those of criminology. The latter are all directly or indirectly concerned with the etiology of crime, and it is for that reason that we have called them problems in criminal behavior. The problems of criminal justice are not at all concerned with criminal behavior. They are exclusively administrative problems concerned only with the efficiency of criminal justice and that of each of its processes. Questions about administrative efficiency are etiological in the sense that they inquire into the adaptation of these processes as means to certain ends, and into the factors upon which varying degrees of efficiency depend. The distinction between criminology and criminal justice can therefore be made by distinguishing between the problem of the etiology of criminal behavior and the problem of the etiology of administrative efficiency.

The end which criminal justice serves is the application of the treatment content of the criminal law to individuals who violate the prohibitions formulated by its behavior content. But this end, which defines the basic purpose of administration, is not an ultimate objective. If it were, we should be administering the criminal law for the sake of enforcing it, and that would be

⁵That the problems of criminal justice are primarily practical problems can be seen by contrast with the problems of criminology which are primarily theoretical problems. In the field of criminology we can be interested in the nature and causes of criminal behavior whether or not we desire to control criminal behavior. The practical activities involved in the control of criminal behavior cannot be successfully undertaken in the absence of knowledge of the causes of criminal behavior, as we have seen; but, as we shall see, the administration of the criminal law is a practical activity which can be performed with some degree of efficiency without knowledge of the conditions of efficient administration.

absurd. The criminal law is administered in order to achieve the ultimate end of the criminal law, which is either punitive retribution or the protection of society against crime.⁶ Thus, if the ultimate end be retributive justice, the criminal law is administered in order to punish offenders; if the social good be the end, it is administered for the purpose of incapacitating and reforming actual offenders and of deterring potential offenders.⁷ Incapacitation, reformation and deterrence are in turn the means by which we seek to protect society by controlling criminal behavior. In order to achieve either of these two ultimate ends or any of the intermediate ends which are means to them, we must enforce the criminal law. In order to enforce the criminal law we must detect crime, identify, apprehend, prosecute and convict criminals, and subject convicts to treatment. In other words, treatment must be preceded by conviction; conviction must be preceded by prosecution; prosecution must be preceded by apprehension; apprehension must be preceded by identification; and identification must be preceded by the discovery of crimes which have been committed.

The administration of the criminal law is thus divisible into a number of processes, each of which serves a subordinate administrative purpose. Just as we do not administer the criminal law for its own sake, so we do not discover crimes, identify and apprehend criminals, prosecute and convict them, for the sake of doing these things, but in order to subject the convicted criminal to treatment. In short, all of the processes of criminal justice which precede conviction are means to the end of treatment which, in turn, is a means either to retributive justice or to the social welfare. Furthermore, it is obvious that each of the processes of criminal justice which precede conviction is a means to all subsequent processes; thus, the discovery of crimes is a means to the identifi-

⁶We have previously discussed these two ultimate ends as the objectives of existing systems of criminal justice. In Chapter XI we shall attempt to answer the question what *should* be the ultimate end of the criminal law. It is not necessary to answer that question here in order to point out that the administration of the criminal law is not an ultimate end but is a means to whatever is the ultimate end of the criminal law.

⁷Punishment, that is, the infliction of pain, may of course be a means to reformation and deterrence.

cation and apprehension of criminals which, in turn, is a means to their prosecution which, in turn, is a means to their conviction.

We must, however, take account of ends which are tangential to this strictly linear series of means and ends, starting with the discovery of crimes and ending ultimately with either retributive justice or the protection of society. Thus, one of our aims in administering the criminal law may be economy in the use of public funds. But economy as an end is not a means either to punishment, incapacitation, reformation or deterrence. It may, in fact, be inconsistent with these purposes; economical administration may make for administrative inefficiency in other respects.⁸ Similarly, the administration of the criminal law may be guided by such interests as the protection of citizens against the arbitrary action of officials and the protection of the innocent who may be prosecuted.⁹ These interests define administrative ends which are not means to punishment, incapacitation, reforma-

⁸Such, for example, as in the certainty and celerity of administration.

⁹It is inevitable that in the enforcement of the criminal law some persons who are in fact innocent should be charged with crime and that some officials should abuse their powers. As a result, there have developed what Dean Pound has called "checks upon prosecution" National Commission on Law Observation and Enforcement, Report on prosecution Washington Government Printing Office, 1931, p. 20 (We shall hereafter refer to the Commission as the National Commission, and it will be understood that all of its reports to which we refer were published by the Government Printing Office.) Dean Pound classifies these checks upon prosecution as a series of mitigating devices or opportunities for escape, a series of constitutional guaranties of the rights of accused persons, and a series of procedural requirements *Op. cit.*, p. 20. Among the mitigating devices to which he refers are the power of the committing magistrate to discharge the accused after a preliminary hearing, the power of the grand jury to refuse to indict, the power of the trial jury by rendering a general verdict to ignore the law, and the power of the executive to pardon. Among the constitutional guaranties are the provision that no one is to be tried for a crime involving death or imprisonment for more than a year or at hard labor except upon indictment by a grand jury, the privilege against self-incrimination, the right of the accused to be confronted by the witnesses against him, and to trial by jury in case of all but petty offenses punishable by a fine or short jail sentence, and the immunity from unreasonable searches and seizures. Among the procedural requirements are the presumption of innocence, the requirement that guilt be proved beyond a reasonable doubt, and many of the rules of evidence, such as that which precludes the use of evidence of the bad character of the accused to prove his guilt of the crime with which he is charged.

As Dean Pound points out, a certain number of mitigating devices and opportunities of escape afforded to the accused person are necessary to a proper administration of the criminal law, and it is of first importance to secure the individual from the arbitrary action of officials and magistrates, but safeguards which experience has shown to be necessary for the protection of the innocent may at times make it difficult or impossible to convict the guilty. In other words, they make for inefficiency in administration as measured by the criteria of certainty and celerity.

tion, or deterrence. They are not ultimate ends, however; they are means to the social welfare without being means to the treatment of offenders. It is in this sense that they are tangential to the processes of criminal justice viewed as means to the ultimate ends of retributive justice and the protection of society against criminal behavior.

The administration of the criminal law can be divided into the processes which are prior to, and the processes which are subsequent to, conviction. In order to understand the nature of administrative problems, it is necessary to distinguish also between consecutive and alternative processes, between complex processes and their constituent or subsidiary processes, and between processes and varieties of processes. The major pre-conviction and post-conviction processes are consecutively related; they are not alternative to each other. Thus, the sentence, imprisonment, and parole or pardon are consecutive, whereas imprisonment and probation are alternative, post-conviction processes. In the same way, detection, identification, apprehension and prosecution are consecutive, whereas accusation by indictment and accusation by information and trial by jury and trial without jury are alternative, pre-conviction processes. This distinction between consecutive and alternative processes is important because we have no choice between consecutive processes in the administration of criminal law.¹⁰ Practical administrative problems must therefore be limited to choices between alternative processes or, as we shall see, different varieties of the same process.¹¹

Many of the processes of criminal justice are extremely complex, and none of them is simple. The more complex are the major processes of detection, of identification and apprehension, of prosecution, of sentencing, and of treatment. Thus, the process of

¹⁰We can only choose between alternative means to the same end, we cannot choose between means to different ends. Consecutive processes are always means to different ends, alternative processes and varieties of the same process are always means to the same end.

¹¹There is one other type of practical problem which we shall discuss later. Each of the tangential ends of administration can be viewed as presenting an alternative, thus, we can decide whether or not to endeavor to protect citizens against abuses of official power, etc.

prosecution in felony cases consists in the subordinate processes of the preliminary hearing, the accusation, the trial and, often, the appeal; and each of these is itself a very complicated process. These processes of which prosecution is composed are consecutive; like the major processes of criminal justice they follow one another in chronological order; but there are, as we have pointed out, alternative processes of accusation and of trial. None of the major pre-conviction processes are alternative to one another; in so far as alternative pre-conviction processes exist, they are always subordinate processes which enter into some more complex process. Thus, the arrest and the summons are alternative methods of apprehending criminals; bail and detention in jail are alternative methods of securing the appearance of persons charged with crime at various stages of their prosecution; the indictment and the information are alternative methods of officially notifying accused persons of the crimes with which they are charged; and trial by jury and trial without jury are alternative methods of establishing the guilt or innocence of alleged offenders.¹²

The processes of criminal justice, whether they be those which are prior or those which are subsequent to conviction, whether they be major or subordinate, whether they be consecutive or alternative, have many varieties.¹³ In order to understand the origin and nature both of alternative processes and of different varieties of the same process, we must consider, first, the character of the institutions which are the instrumentalities by which

¹²Some of these alternative processes, for example, indictment and information, bail and detention, trial by jury and trial without jury, may exist in the same administrative system, some of them may be employed in one jurisdiction and others in another. For example, indictment may be exclusively employed in one jurisdiction as the method of accusation in felony cases, and the information, in another. Whenever either officials or accused persons have the right to select from two or more processes (e.g. trial by jury and trial without jury) the particular process to be employed at any stage, the processes must be alternative. It is unnecessary for our purposes to state who has the choice between these alternatives, when the choice exists, whether officials or the accused, or with respect to what classes of crimes or on what conditions the options can be exercised.

¹³The distinction which we are here making between a process and a variety of a process is formally the same as the distinction we have previously made between a mode of post-conviction treatment and some variety of it. Just as the mode of treatment known as imprisonment exists in many varieties at different times and places, so, for example, the process of prosecution has many varieties at different times and places.

the processes of criminal justice are executed; second, a body of laws which, taken together, we shall call the administrative code; and, third, the range of freedom or discretion which officials possess in respect to the manner in which they shall discharge their duties.¹⁴

In its treatment content the criminal law prescribes the modes by which persons convicted of crime shall be treated, but it does not itself otherwise prescribe or regulate the processes by which it shall be enforced. In so far as these processes are established and regulated by law, this is done by the administrative code. Just as the behavior content of the criminal law is the formal cause of crime, the administrative code is the formal cause of the administration of the criminal law.

The administrative code establishes the major processes of detection, of identification and apprehension, of prosecution, of sentencing, and of treatment, and the various consecutive subsidiary processes which necessarily enter into these processes. It also establishes alternative methods of executing some of these processes, such as the indictment and the information as alternative methods of accusation, and trial by jury and trial without jury as alternative methods of trial. It establishes these processes expressly, or it does so implicitly by defining the functions of

¹⁴It is, of course, obvious that the institutions of criminal justice can be administered only through the activities of human beings, and it should be clear also that, while private as opposed to official persons can participate in the enforcement of the criminal law to a greater or less degree (P. Howard, *Criminal Justice in England*. New York. The Macmillan Co, 1931), the administration of the criminal law is essentially a public function which, in the nature of things, must be performed by representatives of the public, that is, by officials. In this sense they are officials whether they hold what we commonly think of as public office or not. A system of criminal justice administered exclusively by unofficial persons is inconceivable if for no other reason than that the sanction of society must lie back of what they do. Unofficial persons have the legal right, which they occasionally exercise, to make arrests under certain circumstances; and they sometimes participate otherwise in the administration of the criminal law. This is especially true of private police who do not always have official status. Moreover, officials often make use of the services of unofficial persons, such as stool pigeons, informers, *agents provocateurs*, and the rest of that unsavory crew. There are problems which grow out of the participation of unofficial persons in the administration of the criminal law. We shall ignore them, however, for two reasons. In the first place, they are relatively unimportant and, as we have said, it is our purpose to discuss only the more fundamental and pervasive of the problems of crime. In the next place, these problems do not differ in essence from those which we do discuss.

the institutions which it creates as the instrumentalities for the administration of the criminal law.

An institution can be thought of as an office or a structure of offices occupied by individuals who, in the performance of their official duties, exercise the powers and privileges with which they are endowed, and employ the physical facilities with which they are provided. In the main, we can distinguish three aspects of any institution: (1) its structure or plan of organization, (2) its personnel, and (3) its material equipment and facilities. However, this separation of an institution into its parts can be made only by abstraction. An institution is an organism, in the functioning of which these parts are inseparably related. The same institution can differ from time to time, and institutions of the same general type can differ from one another, with respect to one of these three elements without differing in the other two. Thus, the personnel of an institution may vary without change in its organization or its equipment. Similarly, the structure of an institution may vary without variation in its personnel or equipment; and alterations in its equipment may occur without changes in its personnel or structure. As an institution varies in one of these three ways, the manner in which it functions may vary. Since the processes of criminal justice are executed by the various institutions of criminal justice, variations in the same process are to be understood in part in terms of institutional variations in organization, in personnel and in equipment. Thus the process of prosecution will vary from time to time and from place to place with differences in the organization, in the personnel and in the facilities and equipment of the prosecutor's office. But the many varieties of the processes of criminal justice cannot be explained entirely in terms of institutional differences.

The administrative code, as we have said, creates the institutions of criminal justice. It establishes such administrative offices as those of the sheriff, the coroner and the prosecuting attorney, and such administrative departments as the police department and the parole board, and the inferior and superior courts; it arranges their structure or organization; it makes provision for

the personnel and the equipment necessary to enable them to discharge their functions. To a considerable degree it determines the character of the official personnel by prescribing the qualifications of officials, by fixing their compensation and their tenures, and by specifying the methods by which they shall be chosen from the body of citizens. To a considerable degree it also determines the character of the buildings, such as court houses, jails and prisons, and of the other physical facilities employed in the administration of the criminal law, either by specifying their character or limiting their cost.¹⁵ Finally, the administrative code, in that part of it which is known as the code of criminal procedure and the rules of evidence, regulates the manner in which officials shall perform their duties.¹⁶

The administrative code prescribes the consecutive and the alternative processes by which the criminal law is to be administered, in broad terms. It is partly for this reason that it is possible for these processes to be executed in many different ways and for many varieties of them to exist. But the administrative code of any jurisdiction also determines, in part at least, the particular varieties of those processes to be employed in enforcing the criminal law in that jurisdiction. As we have seen, the processes of criminal justice will vary with variations in the character of the institutions by which they are executed; and the character of the institutions of criminal justice in any jurisdiction is

¹⁵It will be readily seen that we have not attempted to describe either the institutions of criminal justice or the content of the administrative code in any detail, but only to indicate their general character.

¹⁶Thus, the code of criminal procedure provides under what circumstances and in what manner officials may make arrests, and to some extent it regulates the sentencing of convicts. Chiefly, however, it establishes and regulates the processes of prosecution, those which intervene between apprehension and conviction, and by which the guilt or innocence of persons accused of crime is determined. Thus, it establishes and regulates the processes by which alleged criminals may be released on bail at various stages of their prosecution, the process by which they are accorded a preliminary hearing of the charges against them, the process by which they are formally accused by indictment or information, and the processes by which they are arraigned before the court and tried. Generally it may be said that the rules of evidence instruct officials regarding the evidence which may be introduced in the trial of persons accused of crime. (The reader who is interested in more detailed information regarding the provisions of the code of criminal procedure and the law of evidence can consult the Code of criminal procedure. Prepared and published by the American Law Institute, 1931, and Wigmore, *Treatise on evidence*. 2nd ed. Boston: Little, Brown, and Co., 1923.)

largely determined by the administrative code which arranges their structure and provides for their personnel and equipment. However, again the administrative code speaks in very general terms. It does not plan the organization of the institutions of criminal justice except in broad outline; it fixes the qualifications of their personnel in such a way that it is possible for persons of widely different character and competence and experience to become officials; and while it prescribes the duties of officials, it does not prescribe their behavior in detail. Within the limits of the general forms which the processes of criminal justice are required to take in any jurisdiction, officials are left with a considerable discretion as to the manner in which they shall exercise their powers and perform their duties. It is for these reasons that different varieties of the same process are discovered in a single jurisdiction.

Moreover, the administrative code is neither a complete set of rules for the regulation of the processes of criminal justice, nor a perfect creation of its institutional instrumentalities. The generality and incompleteness of the administrative code has made it necessary for officials to devise procedures which are not therein prescribed, and to alter institutions to conform to these procedures. Procedures have thus developed in the customary practices of officials which, while not authorized, are not prohibited by the administrative code. Such, for example, is the practice of prosecutors of prosecuting certain crimes and ignoring others, or the practice of bargaining with persons accused of crime for pleas of guilty to less serious offenses than those with which they are charged.¹⁷ Other procedures have developed in the customary practices of officials which are not only unauthorized but are prohibited by the administrative code; that is, they are unlawful. Such, for example, is the practice commonly known as the 'third degree', that is, the extortion of confessions from persons accused of crime by force or other un-

¹⁷Not the least valuable of the contributions of the crime surveys, to which we shall presently refer, has been their disclosure of the extent to which procedures are employed in the administration of the criminal law which are not provided for by the administrative code and which are sometimes prohibited by it.

lawful methods, the practice of demanding excessive bail from them, and the practice of unlawfully searching their homes or places of business for evidence to be used against them.¹⁸

The sources of variation in the processes of criminal justice must now be clear. The major processes of criminal justice are everywhere the same and must necessarily be the same, which is only to say that the administration of the criminal law must everywhere of necessity consist in the pre-conviction processes of discovering the crimes which are committed, and of identifying, apprehending, prosecuting, and trying the persons who committed them, and the post-conviction processes of determining the mode by which convicts are to be treated and of treating them. But these major processes will differ according as they are constituted by different subordinate processes and these, in turn, will vary from time to time in the same place and from place to place, with variations in the institutional background of the processes and with variations both in the administrative code and in the customary practices of officials, whether these supplement or violate the administrative code. It is important to remember that in the United States there is not one criminal code, but fifty; not one administrative code, but fifty; and not one set of institutions for the enforcement of the criminal law, but fifty.¹⁹ There are many varieties of the processes of criminal justice not only in different jurisdictions, but also from time to time in the same jurisdiction. Indeed, they are not always uniform in different parts of the same jurisdiction at the same time.

In considering both the practical and the theoretical problems which grow out of the enforcement of the criminal law, it is therefore essential to distinguish between alternative processes and different varieties of the same process; and it is important to recognize that by a variety of a process we do not mean the behavior of individual officials. While the activities of which the

¹⁸We are treating the provisions of the federal and state constitutions which regulate the processes of criminal justice as part of the administrative code. For what are claimed to be instances of unlawful behavior of officials in the administration of the criminal law, the reader can consult the report of the National Commission entitled *Lawlessness in Law Enforcement*.

¹⁹Namely, those of the States, the District of Columbia and of the United States.

administration of the criminal law consists, are obviously the activities of officials, it is only when those activities become stereotyped and general that they constitute varieties of administrative processes which can be identified and described. The behavior of individual officials, even of the same class, varies infinitely from day to day, and a study of such behavior has practical importance only in that it may make it possible to reform isolated local institutions. If we discover, for example, that the behavior of individual officials is corrupt, we can endeavor to remove them and replace them with honest officials; we can, in a word, try to reform an institution of criminal justice as it exists at a particular time and place.²⁰ But it is only when such conduct becomes typical and takes an institutionalized form in which it ceases to be merely variations in the behavior of particular officials and becomes a variety of an administrative process, that knowledge of such variations acquires generality and, hence, theoretical significance. It is only then that it becomes useful in practice otherwise than as leading to the reform of isolated institutions. We shall therefore formulate both the practical and the theoretical problems growing out of the enforcement of the criminal law in terms of alternative processes and of different varieties of the same process rather than in terms of the behavior of particular officials or of officials of a particular class. It is only in such terms that the researches in criminal justice can be conceived as having been directed towards an etiology of administrative efficiency.²¹

We are now prepared to formulate the practical problems of criminal justice. They involve, first, a choice of what we have referred to as its tangential ends, ends which are means neither

²⁰That is the practical importance of such knowledge as that obtained in the recent investigation of the magistrates court in New York City, of the corrupt conduct of specific magistrates, prosecutors and policemen

²¹We must distinguish between an etiology of administrative efficiency and the etiology of the behavior of individuals who happen to be officials. The latter is a problem in all respects similar to the etiology of criminal behavior. It is, in a word, one of the problems with which an empirical science of human behavior will deal, if such a science is ever constructed. Such knowledge would, of course, be highly useful in solving the practical problems of criminal justice, but it is at present unattainable. An etiology of administrative efficiency would not be developed by a science of human behavior, but rather by an empirical science of socio-political institutions.

to retributive justice nor to the control of criminal behavior. While we cannot choose whether or not to administer the criminal law, whether or not we shall endeavor to accomplish the detection of crimes, the identification and apprehension of the persons who commit them, and their conviction and treatment, we can choose whether or not in the course of the enforcement of the criminal law we shall attempt to achieve such ends as economy in the expenditure of public funds, or the protection of citizens against the arbitrary action of officials, or the protection of innocent persons against conviction for crimes which they have not committed.

For the rest, the practical problems of criminal justice are questions as to means. The means by which the ends of criminal justice are attained are, of course, the processes of criminal justice. Since we have no choice as to whether or not we shall administer the criminal law, we have none as to whether or not we shall employ the consecutive processes of criminal justice. Practical problems as to means, therefore, present choices only between alternative processes or among varieties of the same process. If we desire to achieve efficiency in administration, our aim must be to select the more efficient of available alternative processes or, if only one process is available, to try to contrive a more efficient alternative method of accomplishing the same end. If a process has several varieties, our purpose must be to choose the most efficient or, if no variations exist, to try to vary the process so as to make it more efficient. In order to vary a process, we may have to vary one or more of the elements of the institution by which that process is executed, either its structure or its personnel or its material facilities, or we may have to vary the environment in which the institution is functioning. Proposed changes of these kinds present practical problems in the sense that they require us to choose between the means which we employ in enforcing the criminal law and other means, existing or proposed.

Knowledge can be used both in solving practical problems involving a choice either between available processes or between

available and proposed processes, and also in modifying old processes or devising new processes in an effort to increase the efficiency of criminal justice. The theoretical questions in this field indicate the kinds of knowledge which we can employ in the solution of these practical problems. They are few and they can be briefly stated. We can ask questions regarding the content of the administrative code, what its provisions are and how they have been judicially construed. Since the administrative code establishes the processes of criminal justice and creates the institutions by which they are executed, knowledge of its provisions is essential to an understanding both of the phenomena of criminal justice as they exist and of proposals for increasing the efficiency of the administration of the criminal law. Moreover, it is often only by amending the administrative code that the processes of criminal justice can be altered. Many of the proposals for increasing the efficiency of the enforcement of the criminal law must therefore be viewed as proposals to amend the administrative code.²²

The remaining theoretical questions fall into two groups, the first consisting of questions about the nature and characteristics of the major and subsidiary processes of criminal justice and of their varieties, and about the nature and characteristics of the institutions of criminal justice; and the second, of questions about the efficiency of the processes and of varieties of the processes of criminal justice.

²²Thus, such proposals as that the information be employed instead of the indictment as the method of accusation in felony cases, that the prosecutor be permitted to comment upon the failure of the accused to take the witness stand in his own defense, that the organization of the criminal courts be changed, that the office of public defender be created, and a host of others, cannot be put into practice without amending the administrative code. In general, it may be said that any proposal of an alternative process, or of an alteration in the structure of any of the institutions of criminal justice, or in the qualifications, compensation and tenure of its personnel, or in the methods of selecting its personnel, or in its material equipment, necessitates an amendment of the administrative code as a condition of its adoption. On the other hand, there are many proposals for increasing the efficiency of criminal justice which can be put into practice without alterations in the administrative code, such, for example, as the proposals that political considerations be eliminated in the selection and appointment of federal district attorneys and judges, that police departments and prosecutors' offices adopt more efficient 'working methods', and that proceedings in the minor courts be conducted with order and decorum.

We can inquire into the precise character of each of the processes of criminal justice as it is executed at a given time and place. As we have seen, while the administrative code establishes and regulates these processes, while it prescribes them, it does not describe the manner in which they are executed. The administrative code does not give us information regarding the many varieties of each of the processes which it creates. Knowledge of the provisions of the criminal code is not knowledge of what actually occurs in the enforcement of the criminal law. Knowledge of this sort can be obtained only by observation of the ways in which the processes of criminal justice are actually executed.

We can also inquire into the precise characteristics of the institutions of criminal justice. While the administrative code creates these institutions, it does not describe them as they actually exist. Knowledge of the provisions of the administrative code relating to the structure, the personnel, and the material equipment of these institutions is not knowledge of the manner in which they are in fact organized and administered, or of the way in which they function in fact, or of the precise characteristics of their personnel and material equipment. Such knowledge of the institutions of criminal justice can be obtained only by observing them as they are.

Questions about the efficiency of the administration of the criminal law or that of any of the processes or any of the varieties of any process of criminal justice take different forms.²⁸ In the

²⁸Questions about the efficiency of the institutions of criminal justice can be and are frequently asked. Thus, it can be asked whether or not the Chicago or the New York police department is efficient. But as soon as the question is asked, it is seen that it must be elaborated. Efficiency expresses a relation between means and end. Therefore, one must ask whether or not a police department is efficient in relation, say, to the ends of the detection of crime and the identification and apprehension of criminals. But this is precisely the same question as that of the efficiency of the particular varieties of the processes of discovering crimes and of identifying and apprehending criminals which are employed by given police departments. In other words, questions as to the efficiency of institutions are always questions as to the efficiency of varieties of processes and can be better considered in the latter form. Of course, by observing an institution, a police department, for example, we may discover that it is organized and administered in an unbusinesslike way, and that to a greater or less degree its personnel is corrupt or inexperienced or poorly trained and its material equipment inadequate. We may believe that such factors must inevitably make for inefficiency in the discharge of its functions, and we quite reasonably conclude that it must be inefficient. Or we may observe it as it functions and discover specific in-

first place, we must ascertain and distinguish among the various criteria in terms of which efficiency can be *measured*.²⁴ Thus, for example, certainty and celerity are such criteria. By certainty we mean the degree to which criminal justice or any of its processes achieves given administrative ends. Thus, attempts have been made to measure the certainty of the process of detection by the ratio between the number of crimes that are committed and the number that are discovered; that of the processes of identification and apprehension by the ratio between the number of crimes that are discovered and the number of arrests; that of the process of prosecution by the ratio between the number of arrests and the number of convictions; and that of criminal justice as a whole by the ratio between the number of crimes which are committed (or which are known to the police or the number of arrests) and the number of criminals who are subjected to post-conviction treatment.²⁵

By celerity we mean the speed with which any process is completed. Thus, the celerity of the process of prosecution in felony cases can be measured by the time elapsing between the preliminary hearing, which is regarded as the first step in prosecution, and conviction or acquittal.²⁶ Similarly, financial economy can be used as a criterion of efficiency. There are still other criteria, especially in the case of the post-conviction processes,

 tice and of its processes only vaguely in terms of more or less, and we can never sure that our appraisal is accurate.

²⁴We shall later criticize this conception of certainty as a criterion of efficiency in administration.

 w what degree of celerity is
 1 of efficiency Perhaps we
 teria of efficiency, since it is
 ly with certainty and celerity,
 but with severity and uniformity By severity is meant pain. criminals should be
 treated solely by punitive methods By uniformity is meant that all persons who vio-
 late the same prohibition of the criminal law should be treated alike But we can
 measure severity and uniformity only in terms of certainty We can measure severity
 only by some ratio such as that between the number of persons who commit crimes
 and the number of criminals who are subjected to punitive treatment In the same
 way, uniformity can be measured only by some ratio such as that between the number
 of persons who commit specific crimes and the number of those persons who are
 subjected to a specific mode of treatment.

such as the security of convicts against escape, the physical and mental health of convicts, the value of the products of their labor, and so on.²⁷ Finally, it should be said that these different criteria of efficiency may be inconsistent with one another. We may, for example, discover that the greater the celerity of a process, the less its certainty, or that the greater its certainty, the less its economy.²⁸

In the next place, we can distinguish among questions of efficiency according as they are asked with respect to a single process, or with respect to alternative processes, or with respect to the same process at different times and places. The first type of question asks how efficient any process or any variety of a process of criminal justice is. We almost always know that it is efficient to some degree, but we do not know the precise degree of its efficiency. We usually know that it is efficient to some degree because we usually know that to some extent the purpose for which it is being employed is being accomplished. Usually, therefore, to ascertain the efficiency of any of the processes of criminal justice we need only ascertain the degree to which the end of that process is being achieved.

The second type of question asks about the efficiency of one process in relation to the efficiency of some other process directed to the same end. We can inquire into the relative efficiency of processes which are alternative to one another, or into the relative efficiency of varieties of the same process. Alternative processes or different varieties of the same process are different means to the same end; hence, their relative efficiency can be measured in terms of the degree to which they respectively accomplish this end.

The third type of question asks about the comparative efficiency of the *same* process or the *same* variety of a process at different times or places. Since the process or the variety of the

²⁷We have not attempted an exhaustive enumeration but only a sampling of the criteria of administrative efficiency. To make an exhaustive enumeration, we would have to state in rather precise terms all of the ends, both intermediate and tangential, which we endeavor to achieve by enforcing the criminal law. This we would find extremely difficult to do, since these ends are in large part confused and vague.

²⁸As we shall see, we do not now know definitely what are the relations among the various criteria of efficiency.

process is the same, differences in comparative efficiency must be due to differences in the situations in which the process is employed.

Knowledge of the efficiency of a single process, or of the relative efficiency of alternative processes, or of the comparative efficiency of the same process under different circumstances, does not tell us why any process is inefficient or why there are differences in the degrees of efficiency of different processes. The final question in this group, therefore, asks about the causes of inefficiency. Whereas knowledge of their relative efficiency enables us to choose the more efficient of available alternative processes, we cannot devise more efficient means than any which are available, unless we possess knowledge of the factors upon which degrees of efficiency in administration depend.

In the light of this brief discussion of the theoretical questions which can be asked about the administration of the criminal law, we can introduce our survey of the researches in criminal justice. *In the first place*, we must distinguish between knowledge which we possess apart from these researches and knowledge which we have obtained as a result of them. Knowledge of the former sort is common sense knowledge of the conditions of the efficiency of any practical activity. It is not limited to the administration of the criminal law. We do not need to await the conclusions of research in order to know some of the conditions of efficient practice whether in business or in public affairs. This knowledge consists of common sense generalizations which answer etiological questions, that is, questions regarding the adaptation of means to ends. Thus, we know that the efficiency of any practical undertaking is, in part, a function of the character of the human beings who conduct it, their skill and intelligence; we know that the efficiency of practical enterprises will vary with different types of institutional organization; we know that inadequate physical facilities will impair the efficiency of administrative procedures.

We also know that the efficiency of practical undertakings is conditioned in part upon factors in the environments in which they are conducted, although we may not know precisely what

those factors are or the precise way in which they influence the institutions by which practical affairs are transacted. We know, finally, that if we endeavor to achieve inconsistent ends by a single means, its efficiency will be less than if it were contrived with a single end in view. We can thus account for some of the inefficiency of criminal justice in terms of the many inconsistent ends which we attempt to attain by the administration of the criminal law, in terms of the nature of the processes by which we try to achieve them, in terms of the characteristics of the institutions by which these processes are executed, and in terms of such factors in the social background as popular attitudes toward the enforcement of the criminal law and the pressure exerted by political and criminal organizations upon the personnel of criminal justice.

This common sense knowledge of the etiology of administrative efficiency is, of course, incomplete both in its range and in its detail. Research needs to be done to supplement it and to increase our knowledge of the conditions of administrative efficiency. Especially do we need knowledge of the factors which condition the efficiency of the more complicated processes of criminal justice, both those factors which are intrinsic in, and those which are extrinsic to, the administrative system. We need to know more precisely and completely both those characteristics of a process and of the institutions by which it is executed and those factors in the environment in which the system functions, which condition the efficiency of the more complex processes of criminal justice, and the relationship of the factors of each type *inter se* and to factors of other types. It is nevertheless important to observe that the common sense knowledge which we now possess of the factors upon which administrative efficiency depends, enables us to interpret knowledge which is descriptive of the processes and institutions of criminal justice and of the conditions under which the criminal law is enforced, and thus to form common sense conclusions regarding the causes of the inefficiency of the administration of the criminal law.²⁰

²⁰This is in striking contrast to the situation in which common sense finds itself when in terms of common sense knowledge it attempts to interpret data relating to

In the second place, we must point out that knowledge achieved by research in this field, in contrast to common sense knowledge, does not answer any of the questions about the efficiency of criminal justice.

The knowledge which has been obtained by research is of three kinds: first, knowledge of the contents of the administrative code; second, non-quantitative descriptive knowledge which answers questions about the characteristics of the processes and institutions of criminal justice; and, third, quantitative descriptive knowledge. This body of knowledge answers questions of such types as the following:

1. What are the provisions of the administrative code and how have they been judicially interpreted and construed?

2. How were police departments, prosecutors' offices, the courts and other institutions of criminal justice organized and administered at specific times and in specific places?

3. What were the ages, the educational background, the experience, the intelligence and like characteristics of the particular officials who at a given time and place constituted the personnel of specific institutions of criminal justice?

4. What was the material equipment with which a specific institution was provided at a given time and place, and what were its characteristics?

5. In what manner were specific institutions discharging their functions and in what manner were individual officials performing their duties at given times and places?

6. Questions as to ratios such as (a) the ratio between the number of crimes or of specific crimes known to, and the number of all arrests or of arrests for specific crimes made by, the police of a given jurisdiction in a given period; (b) the ratio between the number of arrests and the number of convictions in a given jurisdiction in a given period; (c) the

ratio between arrests for felonies and commitments by the magistrates in a given jurisdiction in a given period; (d) the ratio between the number of arrests or the number of commitments and the number of indictments in a given jurisdiction in a given period; and (e) the ratio between the number of cases tried by the court with a jury in a given jurisdiction in a given period and the number of convictions obtained in those cases.

7. How many persons were arrested for felonies in a given jurisdiction in a given period; how many or what proportion of those cases were disposed of or eliminated by the release by the police of the persons arrested, how many or what proportion of them were disposed of or eliminated in the preliminary hearing and in each of the succeeding stages of their prosecution, and in what manner?

8. Questions as to ratios of the kinds mentioned in the two preceding questions, but asked with respect to different classes of cases, such as cases classified according to the sex or other characteristics of the accused persons or of the counsel by whom they were represented, or according to the kinds of crimes with which they were charged, or according to the geographic distribution of the cases.

9. Questions as to such ratios, but asked with respect to cases classified according to the nature of the trial or other process which was employed in their prosecution.

10. Questions as to the celerity with which specific processes were executed in given jurisdictions in given periods.

11. Questions as to the relative celerity with which alternative processes or varieties of the same process were executed at given times in given jurisdictions.

12. Questions as to the financial cost of executing specific processes or of maintaining specific institutions in given jurisdictions in given periods.

13. Questions as to the physical or mental health of specific convicts in specific prisons in given jurisdictions in given

periods, or as to the value of the products of their labor, or as to the number of them who escaped, and so on.

14. Questions as to the opinions of specific officials with regard to the efficiency with which specific processes are executed.

All of the knowledge resulting from the attempts that have been made to answer these and similar types of questions is descriptive; some of it is quantitative. None of these questions formulates an etiological problem and, as we have said, the only knowledge that we have of the causes of inefficiency in the administration of the criminal law is our common sense knowledge of the causes of inefficiency in the conduct of practical affairs. We have no such knowledge as the result of researches which have sought to ascertain the causes of the inefficiency of criminal justice.

Knowledge of the content of the administrative code is not empirical knowledge and it is not obtained by empirical investigations. It is knowledge of the provisions of the administrative code as they have been judicially construed, and it is obtained by a study of statutes and judicial opinions. Such studies are conducted by the traditional techniques of the lawyer and they do not differ from studies of other bodies of law.⁸⁰ We shall say no more about them except that, in view of the importance of knowledge of the content of the administrative code both to one who would understand the nature of the processes and institutions of criminal justice as they actually exist and to one who would alter them in an effort to increase the efficiency of criminal justice, further study of the administrative code should be pursued. Few, if any, studies of the code as a whole and of the relations of its various parts and provisions to one another have been completed. We do not hesitate to say that measured by the standards of scholarship established by foreign jurists in their studies

⁸⁰For examples of such studies see Willoughby, *Principles of judicial administration*. Washington: The Brookings Institution, 1929, and the *Commentaries to the Code of Criminal Procedure* prepared by The American Law Institute.

of foreign administrative codes, studies of American administrative codes have been inadequate.

The methods which have been employed in empirical investigations in criminal justice have been the method of direct observation, the case history method, the census method, the administrative experiment, and the questionnaire. We shall describe them briefly.

A. The Method of Direct Observation.

This is the method by which research which results in non-quantitative descriptive knowledge of the processes and institutions of criminal justice is usually accomplished. The results of the investigator's observations are reported in the form of narratives and characterizations. These describe either the characteristics of the structure, the personnel or the material equipment of the institutions of criminal justice, or the manner in which these institutions are discharging their functions and the ways in which officials are exercising their powers and discretion and performing their duties, or some aspect of the social milieu. In the absence of an adequate analysis of the essential elements of a social institution and of the environment in which it functions, investigators observe and describe whatever their common sense tells them is important. The investigators usually interpret, also in terms of common sense, the descriptive knowledge which they obtain, and draw conclusions regarding the efficiency of the processes or the institutions or the officials whom they have observed.

As Moley says, this method is to some degree the method of the artist.⁸¹ As he also says, the validity of the data obtained by observations of this character depends upon the competence, the experience and the integrity of the observers.⁸² The chief value of this method is its capacity for comprehensive description. However, the descriptive reports cannot be compiled because of a lack of precise definition of what is observed.

⁸¹Report to Columbia Criminological Survey, Manuscript, 1930, p. 234.

⁸²*Op. cit.*, p. 236.

B. The Case History Method.

Very few studies have employed this method. It has been used to obtain data with regard to those characteristics of officials which the investigator believes to be relevant to the question of their competence to perform their official duties. At least one investigator has employed this method, not in a study of officials but in a study of offenders for the purpose of determining in what manner the process of bail should be executed.⁸³

C. The Census Method.

There are two varieties of this method, the tabulative or enumerative method and the construction of what are known as mortality tables or statistics.⁸⁴ In both forms it results in quantitative, as opposed to non-quantitative, descriptive knowledge. The reports of such research are usually embodied in tables of one sort or another, and not in narratives or characterizations. Usually research by either form of the census method is concerned with the processes or varieties of the processes of criminal justice rather than with its institutions. The data of such research are found in official records of one sort or another, but most frequently in the records of police departments, of the courts and of penal and correctional institutions.

Of the two forms which the census method takes, the method of enumeration and tabulation is the more simple.⁸⁵ The investigator is interested in one or more of the phenomena of criminal justice, such as the volume or geographic distribution of crime or of specific crimes, the number of arrests or prosecutions for all crimes or for specific crimes, the number of convictions or acquittals for all crimes or for specific crimes, the number of cases coming before different courts and their char-

⁸³Beeley, *The bail system in Chicago* Chicago: The University of Chicago Press, 1927.

⁸⁴This use of the word statistics must be distinguished from our earlier use of the word in the discussion of criminological research, to denote the application of special techniques of calculation and inference to data. Here the word is synonymous with tabulation. Perhaps a more accurate name for the tables would be 'tables of eliminations'.

⁸⁵As Moley says, it is merely a tabulation of quantities. *Op. cit.*, p. 234.

acter, the age, sex, nationality and like characteristics of convicts, and so on. He goes to police, judicial, penal or other official records and counts the number of instances which he finds recorded of each of the phenomena which he is investigating and tabulates the totals. It is by this method that officials, such as chiefs of police, prosecutors, attorneys general and judicial councils prepare their annual reports, and these reports, which must be regarded as secondary sources, are often the source of the data used in research conducted by the method of enumeration and tabulation.

The construction of a mortality table is a more complex form of the census method. Moley has described it as the method "of taking a large number of cases and developing statistical compilations of them and the drawing of conclusions therefrom."³⁶ "The process", he says, "is very simple from the standpoint of statistics. It consists in preparing a schedule card with provision for appropriate and significant data concerning an individual case. Some process of sampling"³⁷ is adopted and the court records are searched for the facts concerning the progress of each individual case. These facts are merely procedural ones, such as the date of arrest, the charge, the date of the preliminary hearing, the result, etc. No attention is paid to the material facts of the case, and very little record is made of the essential personal facts concerning the accused except, perhaps, sex, color and age."³⁸

The construction of a mortality table differs from the method of enumeration and tabulation in only three respects. In the first place, a mortality table is not merely a tabulation of the data to be found in official reports or records. Recognizing the doubtful accuracy and reliability of such records, some investi-

³⁶*Op. cit.*, p. 237.

³⁷In his report, pp 239-246, Moley describes in some detail the methods of sampling which have been employed and criticizes them. He says "In other words they (the surveys) have been compelled to sample their material and the sampling has varied from place to place. No very serious questions have arisen in this connection but a review of these studies leaves one with the feeling that comparisons and correlations are fairly unsatisfactory except among parts of the various studies. For example, New York may be compared with Chicago but it is dangerous to compare the State of Illinois with the State of New York on the basis of the information which we have."

³⁸*Op. cit.*, pp. 238 *et seq.*

gators have been unwilling to rely upon them, and have gone for their data to original sources, such as the files of the courts, upon which these records are based. In the next place, a mortality table purports to be a history of specific cases and not merely a tabulation of the number of arrests or convictions or acquittals or similar results of administrative processes.³⁹ The more comprehensive mortality tables record either all the arrests or all the arrests for felonies or for misdemeanors in a given jurisdiction in a given period, or some sampling of them, and follow these very cases through the administrative processes. The construction of a mortality table is thus an attempt to study and describe the enforcement of the criminal law at a given time and place as a series of integrated processes.

In the third place, mortality tables constitute a detailed description of the subsidiary processes which enter into the process of prosecution. They do not merely tabulate such major procedural events as arrests, convictions and acquittals; they show in detail the various processes by which the cases whose procedural history they record, were disposed of, and the number of cases disposed of by each process. The mortality tables enumerate, for example, the various steps in the process of prosecution, namely, the preliminary hearing, the accusation by indictment or information,⁴⁰ the trial, and the appeal; and they record the number of cases disposed of in each stage of prosecution and the various subsidiary processes by which they were disposed of.

The first mortality table was that constructed in the course of a survey by the Cleveland Foundation of the administration of the criminal law in Cleveland,⁴¹ which was the first of a number of surveys which have been made of criminal justice in various

³⁹Bettman has described the purpose of a mortality table as follows: "The purpose is to set up the statistics in such a way as to give a picture of the number and percentages of cases which fall away or die, so to speak, at the various stages of the prosecution and trials, and thereby throw some light upon the relative responsibility of the various organs of the administration for the dispositions of cases as actually made." See National Commission, Report on prosecution, p. 53.

⁴⁰The rubric actually used in the tables is Grand Jury.

⁴¹The Cleveland Foundation, *Criminal justice in Cleveland*, 1922. (Hereinafter referred to as *Cleveland Crime Survey*.)

American states and cities.⁴² The mortality table has thus become largely identified with the crime survey.⁴³ The crime surveys constitute the first attempts to study and describe the administration of the criminal law as a whole, that is, as a series of integrated processes conducted by a number of related institutions, and it is in this that their importance chiefly lies.⁴⁴ The investigators who have conducted the more comprehensive crime surveys have employed not only the census method, but also the method of direct observation, the case history method, the questionnaire method, and even the method of the administrative experiment.⁴⁵ The reports of the crime surveys contain a great deal of information regarding the administration of the criminal law and the institutions of criminal justice in the various states and cities in which they have been conducted. All of it is descriptive; some of it is quantitative and some of it is non-quantitative. The quantitative is to a considerable extent mingled with the non-quantitative.

⁴²For a history of the crime surveys and a more complete and methods, see Moley, *Our criminal courts* (New York, 1930), Ch. XI. See also National Commission, *Report on the Commission for Criminal Justice*, The Missouri crime survey, 1926; Illinois Association for Criminal Justice, *The Illinois crime survey*, 1929; Institute of Law of Johns Hopkins University, *Bull. No. 3, Study of the judicial system of Maryland* (Baltimore: The Johns Hopkins Press, 1931); Georgia State Department of Public Welfare, *Crime and the Georgia courts*. *J. Crim. Law and Criminol.*, 1925, 16, 169-218; Fuller, *Criminal justice in Virginia*. New York: The Century Co., 1931. These are the reports of the principal crime surveys, all of which were conducted by private agencies. Various official and unofficial crime commissions have conducted similar studies. See, for example, *Reports of the New York State Crime Commission for 1927, 1928 and 1929*, *Report of the Pennsylvania Crime Commission to the General Assembly*, 1929, *Ninth Annual Report of the Baltimore Criminal Justice Commission*, 1931, *Report of the Crime Commission of Michigan*, 1930.

⁴³However, individual investigators have constructed mortality statistics. See, for example, Kitchelt and Farrow, *Report on a minor survey of the administration of criminal justice in Hartford, New Haven and Bridgeport, Connecticut*. *J. Crim. Law and Criminol.*, 1926, 17, 375-457; Wood, *A study of arrests in Detroit, 1913 to 1919*. *J. Crim. Law and Criminol.*, 1930, 21, 168-200; Heinzen and Rypins, *Crime in San Francisco*. *J. Crim. Law and Criminol.*, 1927, 18, 75-91.

⁴⁴Prior to the surveys no attempt had been made to study the administration of the criminal law anywhere as a whole. Indeed, prior to that time the only intensive studies of any of the institutions of criminal justice and of their functioning were those made of police departments by the Bureau of Municipal Research, now the Institute of Public Administration. That does not mean, of course, that these institutions had not previously been observed and described, but only that such studies were casual and isolated and rarely made by trained observers.

⁴⁵Our separate enumeration and description of these methods must not be taken to mean that two or more of them are not often employed in the same investigation. As in the case of the methods by which research in criminology is conducted, empirical studies in criminal justice are often conducted by two or more methods.

tative. Together they are offered as a description of criminal justice in a given jurisdiction. It is important, therefore, to recognize that the quantitative information gathered by the crime surveys must be considered with or against the background of the non-quantitative information, if it is to be understood and interpreted.

D. The Method of the Administrative Experiment.

This method has been rarely employed. It requires the co-operation of administrative officials. It consists in varying with their consent some institution or process of criminal justice and of attempting to study the effects of the change. Perhaps the best example of an experiment of this kind is that which was conducted by the Chicago Crime Commission with the cooperation of the State's Attorney in Chicago. The Commission, which had been studying the bail process and which had become convinced that it was being inefficiently executed, was permitted to install a bail bond bureau in the State's Attorney's office and to observe its operation. The difficulty with such attempts at experimentation is that of constructing a restricted field of variables. In order to study the efficiency of alternative processes or of different varieties of the same process, all relevant factors must be held constant other than those which are being investigated. For example, no conclusion can be drawn regarding the relative efficiency of two varieties of the bail process, unless we know that the institutions by which they are being executed and the relevant factors in the environmental background of the institutions are the same.

E. The Questionnaire Method.

This method is employed for two purposes: either to obtain non-quantitative or quantitative data of the same sorts as those which are obtained by the method of direct observation and the census method, or to obtain the opinions of officials or other persons who have had the opportunity to observe the functioning of the institutions and the execution of the processes of criminal

justice, regarding the relative efficiency of alternative processes or different varieties of the same process, or regarding the comparative efficiency with which the same process or the same variety of a process is executed at different times or places.⁴⁶ The questionnaire is often used in a single study for both purposes.⁴⁷

The criteria by which we shall evaluate the findings of research in criminal justice are the same as those by which we evaluated the findings of research in criminology, that is, their validity and their significance. The validity of the findings of research depends upon their accuracy and their reliability. Their significance is determined by the conclusions which can be drawn from them, that is, by the questions which the findings enable us to answer. If the empirical studies in criminal justice answer the questions by which they were directed, a further estimate of their significance can be made in terms of the significance of those questions. In the next chapter we shall consider the practical importance, as opposed to the theoretical significance, of the knowledge which has been obtained by research in criminal justice. As we shall see, it may possess a practical utility which is greater than its theoretical significance.

⁴⁶The questionnaire is a wasteful method of investigation. Usually a comparatively small proportion of the questionnaires are answered. In order to insure that they will be answered by any considerable proportion of the persons to whom they are sent, the questions must be formulated in such terms as to permit of very simple answers such as "yes" and "no." The difficulty here is that problems are oversimplified and the answers are not given with the necessary qualifications. Moreover, such answers as "yes", "no" and "doubtful" do not always mean the same thing. For example, in response to different questions "no" may indicate a decidedly negative reaction or it may indicate inattention or indifference to the question. Moreover, answers may be lacking in significance because of failure to follow instructions regarding the manner in which the questions are to be answered, or for like reasons. Considerations such as these probably explain the wide divergencies among answers to questions propounded to officials in the same jurisdiction with respect to the phenomena of criminal justice in that jurisdiction. Too much value cannot be attached to opinions obtained by the questionnaire. The belief of some investigators is that the questionnaire is an excellent method of obtaining detached and expert opinions regarding the efficiency with which the processes of criminal justice are executed. The qualifications of the persons to whom the questionnaire is sent to express such opinions are rarely indicated except to state that they are officials of one sort or another. It may be that the opinion of one well trained observer would be more valuable than those of many untrained and prejudiced observers.

⁴⁷See, for example, Morse, A survey of the grand jury system (1931) 10 Ore. L. Rev. 101, 217, 295.

In the following section we shall survey typical empirical studies of the administration of the criminal law, grouping them by the types of questions which their findings will answer. It must be understood that the researches which we shall summarize constitute only a small part of all the researches which have been completed in this field. Our purpose is merely to give an exemplary sampling of them in order to indicate the character of empirical work in criminal justice and of the knowledge which it has yielded.

Section 2. A Survey of Empirical Studies of the Administration of the Criminal Law.

I. HOW WERE POLICE DEPARTMENTS, THE OFFICES OF THE SHERIFF, THE CORONER AND THE PROSECUTOR, THE COURTS, PAROLE AND PROBATION DEPARTMENTS, PENAL AND CORRECTIONAL INSTITUTIONS, AND THE OTHER INSTITUTIONS OF CRIMINAL JUSTICE ORGANIZED AND ADMINISTERED AT SPECIFIC TIMES AND PLACES.⁴⁸

II. WHAT WERE THE AGES, THE EDUCATIONAL BACKGROUND, THE EXPERIENCE, THE INTELLIGENCE, THE POLITICAL CONNECTIONS AND AFFILIATIONS, AND SIMILAR CHARACTERISTICS OF THE PARTICULAR OFFICIALS, SUCH AS POLICEMEN, SHERIFFS, CORONERS, PROSECUTING ATTORNEYS, JUDGES, PROBATION AND PAROLE OFFICERS, PRISON GUARDS AND WARDENS, WHO AT A GIVEN TIME AND PLACE CONSTITUTED THE PERSONNEL OF THE INSTITUTIONS OF CRIMINAL JUSTICE.

III. WHAT WAS THE MATERIAL EQUIPMENT WITH WHICH A SPECIFIC INSTITUTION WAS PROVIDED AT A GIVEN TIME AND PLACE, AND WHAT WERE ITS CHARACTERISTICS.

IV. IN WHAT MANNER WERE SPECIFIC INSTITUTIONS DISCHARGING THEIR FUNCTIONS AND IN WHAT MANNER WERE INDIVIDUAL OFFICIALS PERFORMING THEIR DUTIES AT GIVEN TIMES AND PLACES.

⁴⁸By 'administered' in this connection we mean the internal administration or management of the institution.

The answers to questions such as these consist chiefly of non-quantitative descriptive knowledge obtained by the method of direct observation. It is almost as voluminous as the non-quantitative descriptive knowledge which we have about criminals, their characteristics and environments. It forms a vast body of literature.⁴⁹ We cannot summarize this knowledge within the limits of this book, and it is unnecessary to do so. For our purposes it is sufficient to indicate its general character, of which the types of questions which it will answer are some indication. In addition to stating these questions, it will be enough briefly to describe a few of the studies which have been conducted by the method of direct observation.⁵⁰

(a) Bruce Smith, assisted by a staff, made a study of the Chicago Police Department.⁵¹ He first describes the structure of the department. At the time of the investigation it had a strength somewhat in excess of 6,500 men. There were no less than 19 separate offices, bureaus and divisions or sections owing direct administrative responsibility to the police commissioner, whose office was more than a mile away from police headquarters in which most of these units were located. Intimately related

⁴⁹The reader who is interested in knowing how vast it is, can refer to Kuhlman, *A guide to material on crime and criminal justice* New York: The H. W. Wilson Co., 1929. This contains a bibliography of material relating to the administration of the criminal law which is by no means complete, but which has hundreds of titles. See, in particular, Sections One, Three, Five, Six and Seven. The reader can also refer to the bibliography on Prosecution contained in the Report on prosecution of the National Commission, and to the bibliography of the material relating to the cost of crime contained in the Report on the cost of crime of the same Commission.

⁵⁰The reader who wishes a more detailed acquaintance with this knowledge can refer to the reports of the various crime surveys (See p. 268, fn. 42, *supra*), to the reports of the National Commission on Prosecution, on Police, and on Penal institutions, probation and parole, and to Fosdick, *American police systems*. New York: The Century Co., 1920; Fosdick, *European police systems*. New York: The Century Co., 1915; Sellin (editor), *The police and the crime problem*. *Annals Am. Acad. Pol. and Soc. Science*, Nov., 1929. Moley, *Politics and criminal prosecution*. New York: Minton, Balch and Co., 1929. Moley, *Our criminal courts*. New York: Minton, Balch and Co., 1930. Fishman, *Crucibles of crime*. New York: Cosmopolis Press, 1923; Sutherland and Sellin (editors), *Prisons of tomorrow*. *Annals Am. Acad. Pol. and Soc. Science*, Sept., 1931. Lawes, *Twenty thousand years in Sing Sing*. New York: Ray Long and Richard R. Smith, 1932; *Division of Medical Education of the Rockefeller Foundation, Institutes of legal medicine*. New York, 1928.

⁵¹The Citizens' Police Committee, *Chicago police problems*. Chicago: The University of Chicago Press, 1931. This is one of the very best of the studies executed by the method of direct observation.

functions were distributed among a number of these units, preventing systematic planning and economical use of man-power. The police commissioner's day was largely devoted to conferences with political visitors, with the result that there was little time left for the business of the Department. He was appointed by the mayor, with the advice and consent of the city council. The Department was seriously divided by internal jealousies and conflicts, which made it difficult to find a police officer possessing the requisite impartiality to command; and yet the commissioner was usually chosen from the rank and file of the Department. In 70 years the Department had had 31 administrators. Twenty-four of them served for only one or two years. The commissioner was unable to exercise final authority in his control over his subordinates.

In similar detail, the manner in which the personnel of the Department was managed, the manner in which the uniformed patrol was employed and criminal investigations were conducted, the crime prevention activities, the records of the Department, the management of its property and equipment, and its scales of compensation and provisions for the welfare of the members of the force, are all described and criticized.

It was discovered that the Civil Service Commission had failed to exact high standards for appointment and promotion and to support the police commissioner in disciplinary cases. At the time of the investigation one of the commissioners was under indictment for selling promotions in the Department. The Commission was found to be quite as vulnerable as the police commissioner to political and other selfish influences. Analysis of the previous occupations of candidates for the force showed that chauffeurs, street car conductors and motormen and railroad laborers comprised about half of the total. Applicants were rarely rejected as a result of an investigation of their character. A review of the various tests applied by the Civil Service Commission in grading candidates for promotion disclosed that they consisted of a series of efficiency ratings which had lapsed, a written examination of police duties which did not test efficiency,

a seniority rule which favored senility, and an arbitrary preference for veterans which carried heavy weight. The training school for recruits expended little or no effort to secure an intelligent understanding of the subject under discussion.

Of the total personnel of the Department there were but 750 patrolmen available for uniformed foot patrol duty on an average 24-hour day. The city was divided into 41 police districts, each under the command of a police captain who was easily accessible to local political leaders and over whom the commissioner exercised very little control. The patrol-wagon service suffered from neglect both as to equipment and as to organization.

At the time of the survey the detective division was made up of nearly a thousand individuals, many of whom owed their assignments to political influence. Systematic instruction for the detectives was conspicuously lacking.

While the Department had a good system of records, they were not well kept. An amazing percentage of offenses known to have been committed and to have been reported to the police were found to have been suppressed, and reported to the criminal records bureau only when the offenders had been apprehended and the offenses cleared up. The investigators reached the conclusion that the captains adopted that policy in order to keep the record of crime in their district as low as possible.

(b) Moley observed the Chicago Municipal Court during the course of the Chicago crime survey and his observations are set forth in the survey report.⁵² The court-rooms were found to be small, badly ventilated, crowded and noisy. The cases were heard amid great confusion. The accused were not separated from the spectators, and political fixers and professional bondsmen were conspicuous in the court-room. The judge was accessible to anyone who wished to speak to him during the course of the proceedings. The prosecuting attorney assigned to the court to represent the State was unfamiliar with the cases, which he presented in a very perfunctory way. Indeed, the questioning

⁵²The Illinois crime survey, pp. 393-419.

of witnesses was usually conducted by the police rather than by the prosecutor.

Moley's study is only one of a number of such studies executed by the Chicago crime survey. The report of the survey describes in great detail such matters as the organization and administration of the prosecutors' offices throughout the State, rural police practices, the organization, administration and functioning of the Chicago Police Department, the coroner's office, and the probation and parole systems.

Similar descriptive knowledge obtained by direct observation is to be found in the reports of the other crime surveys.

(c) Schultz and Morgan conducted a study of the offices of coroner and medical examiner for the National Research Council.⁵³ They selected a number of the larger cities, placed the study of the coroner's office in each city in charge of a local medical and a local legal investigator, and gave the local investigators outlines of the information which they desired. Their report first describes the history of the coroner's office and the duties of the coroner, medical and judicial, and summarizes prior surveys of the coroner system in New York, Cleveland, and Missouri. They then recapitulate the reports of their local investigators on the coroner's office in New Orleans, San Francisco, and Chicago. They compare the findings of these studies with those of studies of the office of the medical examiner in Boston and New York City.⁵⁴

Their report describes the organization, the personnel and the physical facilities of the particular coroners' and medical examiners' offices which were studied. Thus, in Chicago it was observed that the office of coroner was elective, that it was sought after by those with political aspirations because it permitted the building up of a personal political following, and that there were no professional requirements for the office.

⁵³Bulletin of the National Research Council, No 64. The coroner and the medical examiner. Washington: The National Research Council of the National Academy of Sciences, 1928.

⁵⁴Not the least interesting feature of this study is its attempt to compare institutions by direct observation.

Neither the coroner in office at the time of the investigation nor his predecessors had had medical or legal training.

In 1919 there were attached to the coroner's office five pathologists and a competent chemist. A well equipped morgue was available for a portion of the coroner's necropsies. At the time of the investigation it was discovered that the men selected for the medical positions had had no previous training or experience in autopsy work. Of the physicians attached to the coroner's office, two were specialists in internal medicine, one in surgery, one in gynecology, and one in medico-legal work and toxicology. The non-technical staff was of no higher grade of ability. In very important cases it was usually possible to secure a fairly high grade jury, but in all other instances the jury was picked by a policeman, a deputy coroner, or an undertaker from the immediate neighborhood in which the inquest was to be held. In some instances unemployed men made it a practice to follow the deputy coroner from place to place so as to be on hand when a jury was picked.

In 1926, the year in which the office was investigated, no complete autopsy was made, that is, none in which the findings at the section table were verified by further histological and bacteriological examinations. Even in murder cases there was a tendency to abbreviate the autopsy. In many cases in which organs and tissues were brought to the chemical laboratory for examination, they were wrapped up like so much beefsteak or in unsealed containers. The chemical examinations were briefly and inadequately conducted. No one on the staff was competent to make histological examinations.

The relation between the coroner and undertakers was close.

The reports of the coroner's physicians were found to be inadequate, the average report being less than one page in length. They were of small value as legal documents and almost worthless as scientific documents. The coroner was apparently averse to post-mortem examinations, probably because of political support and campaign contributions received by him from under-

takers who brought influence to bear upon him at the request of relatives to prevent the performance of necropsies.

The offices of medical examiners in Boston and New York City were described in a similar manner, and it was concluded that in every respect the medical examiner system is superior to the coroner system.

We shall now survey typical examples of the research in criminal justice which has resulted in quantitative findings.

V. WHAT WAS THE RATIO BETWEEN THE NUMBER OF CRIMES OR OF SPECIFIC CRIMES KNOWN TO THE POLICE AND THE NUMBER OF ALL ARRESTS OR OF ARRESTS FOR SPECIFIC CRIMES MADE BY THE POLICE OF A GIVEN JURISDICTION IN A GIVEN PERIOD.

VI. WHAT WAS THE RATIO BETWEEN THE NUMBER OF ARRESTS OR OF THE ARRESTS FOR SPECIFIC CRIMES AND THE NUMBER OF ALL CONVICTIONS OR OF CONVICTIONS FOR SPECIFIC CRIMES IN A GIVEN JURISDICTION IN A GIVEN PERIOD.

VII. WHAT WAS THE RATIO BETWEEN THE NUMBER OF ARRESTS FOR FELONIES AND THE NUMBER OF COMMITMENTS BY THE MAGISTRATES IN A GIVEN JURISDICTION IN A GIVEN PERIOD.

VIII. WHAT WAS THE RATIO BETWEEN THE NUMBER OF ARRESTS FOR FELONIES OR THE NUMBER OF COMMITMENTS BY THE MAGISTRATES AND THE NUMBER OF INDICTMENTS IN A GIVEN JURISDICTION IN A GIVEN PERIOD.

IX. WHAT WAS THE RATIO BETWEEN THE NUMBER OF CASES TRIED AND THE NUMBER OF CONVICTIONS IN A GIVEN JURISDICTION IN A GIVEN PERIOD.

These questions are typical of those which are answered by the findings of research conducted by the enumerative or tabulative form of the census method. Studies of this type are exceed-

ingly numerous. It will be sufficient to indicate the general character of their findings by referring to a few of them.

(a) The New York Crime Commission has estimated that only 15% of the criminals in the State of New York are apprehended by the police.⁵⁵ Lashley has estimated that less than 20% of the persons who commit crimes in Chicago are arrested by the police.⁵⁶ This estimate was based upon a comparison of the number of complaints of robberies and burglaries made to the police in a certain period and the number of prosecutions for those crimes begun in that period. Only 5% of the cases in which complaints were made resulted in the punishment of offenders.

(b) It was found by the Missouri crime survey that only 964 warrants of arrest were issued in the case of 13,444 felonies known to have been committed in Missouri in a certain period; and that only 374 cases resulted in the punishment of the criminals.⁵⁷

(c) It was found in the Missouri crime survey that of those committing major crimes in Missouri, such as homicide, burglary, robbery and assault, not one out of ten is apprehended and punished; that not over 25% of those arrested and prosecuted are convicted and adequately punished; and that less than 50% of those placed on trial before a jury are convicted and adequately punished.⁵⁸

(d) The report of the Chicago police commissioner for 1930 shows that of 15,304 persons who were prosecuted for crimes charged by the police, 6,757 were found guilty of the offense charged and 1,106 of a lesser offense.⁵⁹

X. OF THE TOTAL NUMBER OF PERSONS, CLASSIFIED BY SEX, ARRESTED FOR FELONIES IN A GIVEN JURISDICTION IN A GIVEN PERIOD,

⁵⁵Report of the Crime Commission, 1929, p. 125

⁵⁶A. V. Lashley, *The Illinois crime survey* J. Crim. Law and Criminol., 1930, 20, 588-605

⁵⁷Missouri crime survey, p. 543

⁵⁸Missouri crime survey, p. 349.

⁵⁹Chicago Police Department, *Annual Report*, 1930, p. 28.

WHAT PROPORTIONS WERE CONVICTED AND BY WHAT METHODS WERE THE CASES ELIMINATED IN WHICH CONVICTIONS WERE NOT OBTAINED.

Wood made such a study of the arrests in Detroit for the period 1913-1919. Of the males 54% were convicted of some offenses as the result of pleas of guilty or of trials, and of the females, 52.3%.⁶⁰

XI. OF THE TOTAL NUMBER OF CASES ENTERING THE TRIAL STAGE, CLASSIFIED AS (A) FELONIES AND MISDEMEANORS, (B) FELONIES, (C) LIQUOR CASES AND NON-LIQUOR CASES, WHAT PROPORTION OF EACH CLASS RESULTED IN CONVICTIONS, BY WHAT METHODS WERE THE REMAINING CASES DISPOSED OF, AND WHAT PROPORTIONS WERE DISPOSED OF BY EACH METHOD.

Such a study was made by the Virginia crime survey.⁶¹

XII. HOW MANY PERSONS WERE ARRESTED FOR FELONIES IN A GIVEN JURISDICTION OR JURISDICTIONS IN A GIVEN YEAR; HOW MANY OR WHAT PROPORTION OF THESE CASES WERE DISPOSED OF OR ELIMINATED BY THE RELEASE BY THE POLICE OF THE PERSONS ARRESTED; HOW MANY OR WHAT PROPORTION OF THESE CASES WERE DISPOSED OF OR ELIMINATED IN THE PRELIMINARY HEARING AND IN EACH OF THE SUCCEEDING STAGES OF THEIR PROSECUTION, AND IN WHAT MANNER.

XIII HOW MANY PERSONS WERE ARRESTED FOR MISDEMEANORS IN A GIVEN JURISDICTION OR JURISDICTIONS IN A GIVEN YEAR OR YEARS; HOW MANY AND WHAT PROPORTION OF THESE CASES WERE DISPOSED OF OR ELIMINATED BY THE RELEASE BY THE POLICE OF THE PERSONS ARRESTED; AND HOW MANY AND WHAT PROPORTION OF THESE CASES WERE DISPOSED OF OR ELIMINATED IN THE COURSE OF THEIR PROSECUTION, AND IN WHAT MANNER.⁶²

⁶⁰Arrests in Detroit. J Crim Law and Criminol, 1930, 21, 168-200

⁶¹Criminal justice in Virginia, pp 75-101, where the results of the study are set forth.

⁶²The stages in the prosecution of misdemeanors are fewer in number than those in the prosecution of felonies; there is, as a rule, no preliminary hearing of misde-

XIV. HOW MANY AND WHAT PROPORTION OF THE FELONY CASES WHICH REACHED THE PRELIMINARY HEARING OR SOME SUBSEQUENT STAGE OF PROSECUTION WERE DISPOSED OF OR ELIMINATED IN THAT STAGE AND IN SUBSEQUENT STAGES, AND IN WHAT MANNER.⁶³

These questions are typical of those which are answered by mortality tables or statistics. We shall subsequently formulate other questions which they answer, but it must be understood that our enumeration of the questions, answers to which are to be found in mortality statistics, is not exhaustive. It is, as we have said, enough for our purposes to indicate the kind of knowledge which the mortality tables have given us.

In Appendix I we have set forth a few of the more comprehensive mortality tables. By reference to this Appendix it will be observed that, as we have said, the mortality table enumerates the major pre-conviction steps or processes, the first of which is designated the stage of arrest.⁶⁴ The succeeding stages, in felony cases, in chronological order are designated as the Preliminary Hearing, the Grand Jury, the Trial, and the Appeal.⁶⁵ The procedure in constructing a mortality table is to record the number of arrests for felonies⁶⁶ in a given jurisdiction in a given period, and then to ascertain and record what proportion of those cases was eliminated in succeeding stages, and by what methods.⁶⁷

meanor charges and the grand jury does not act upon them. Consequently it is necessary to state the questions with respect to misdemeanors apart from those with respect to felonies. Very few studies have been made of the disposition of arrests for misdemeanors; most of the studies have been of the disposition of felony cases. In a few instances, investigators have lumped felony and misdemeanor arrests without distinguishing between them.

⁶³It is necessary to ask this question because a number of investigations have employed as their base, not the number of arrests, but the number of cases which reached the preliminary hearing or some subsequent stage of prosecution.

⁶⁴In only one instance, so far as we know, has the survey begun with the number of crimes known to the police, as opposed to the number of arrests. See Baltimore Criminal Justice Commission, Ninth Annual Report, 1931, pp 9-16 (mimeographed).

⁶⁵Only a few of the tables include the stage of the Appeal.

⁶⁶That is, if the study is a study of felony cases. Usually, as we have pointed out, the mortality tables deal exclusively with felony cases.

⁶⁷The number of arrests for each year usually includes the cases pending at the end of the preceding year. It is only if one assumes that the number of pending cases bears a fixed relation to the total number of cases for each year and that the eliminations at the various stages are approximately the same from year to year, that these tables can be regarded as true mortality tables, that is, as being comparable to the

As we have said, the first of the mortality tables was prepared in the course of the Cleveland crime survey, and although in subsequent surveys the technique of compiling mortality tables has been developed, the Cleveland table may nevertheless be taken as typical. By reference to Column I of Appendix I, it will be observed that the police of Cleveland made 4,499 arrests for the year 1919.⁶⁸ These arrests are treated as constituting all or 100% of the felony cases in Cleveland for that year.⁶⁹

Column 1 shows that 12.71% of the persons arrested were discharged by the police, so that only 87.29% of the cases reached the preliminary hearing.⁷⁰ 10.74% of the persons arrested were discharged outright by the magistrates,⁷¹ and 1.27% were discharged without prosecution.⁷² 0.53% of the cases were dismissed for miscellaneous reasons,⁷³ and in 1.78% of the cases the charges were reduced to misdemeanors.⁷⁴ In other words, 12.71% of

mortality tables prepared by life insurance actuaries. If such tables are prepared over a long series of years for the same jurisdiction and these tables are consolidated, the result will be more in the nature of a true mortality table.

⁶⁸This assumes that the police record of arrests, from which this figure was obtained, was accurate. Moreover, in the Cleveland survey one table was prepared dealing with the cases which entered the Municipal Court (the stage of the preliminary hearing) and another was prepared dealing with the cases which entered the Court of Common Pleas (the stage of trial), and these two tables were combined. This involves an assumption that the cases which entered the trial stage were among the cases which entered the stage of the preliminary hearing.

⁶⁹The table uses the number of arrests as the base for the calculation of all percentages. However, in some of the surveys the base was the number of cases entering each stage and the eliminations in each stage were stated in terms of percentages of the number of cases entering that stage.

⁷⁰The preliminary hearing is usually held before a magistrate or other inferior judicial officer for the purpose of determining whether or not there is reasonable ground for believing the accused to be guilty of the crime with which he is charged. If the magistrate finds that there is, he commits the accused to jail or releases him on bail, pending the action of the grand jury or the filing of an information against him by the prosecuting attorney, according to the procedure which obtains in the particular jurisdiction. If the magistrate finds that there is not, he discharges the accused. For further information regarding the purposes of the preliminary hearing, its history, and the conditions under which it is conducted in some courts, see Moley, *Our criminal courts*, Chs. I, II, and the reports of the various crime surveys.

⁷¹Presumably because after hearing the evidence they concluded that there was not sufficient ground for the prosecution of these cases.

⁷²Presumably because the aggrieved persons failed to appear and press the charges or because of a lack of witnesses by whom the charges could be sustained or for similar reasons the magistrates discharged these persons without hearing any evidence.

⁷³Such as the death or insanity of the accused or the transfer of their cases to another court, e.g. the juvenile court.

⁷⁴Presumably because the evidence did not sustain the felony charges.

the cases having been eliminated by the police, an additional 22.81% were eliminated in the stage of the preliminary hearing.

Only 64.48% of the cases entered the grand jury stage, where 13.89% of them were eliminated by the grand jury's failure to return indictments.⁷⁵

The result was that only 50.59% of the total number of cases entered the trial stage. There, 10.01% of them were dismissed by the prosecutor,⁷⁶ .3% by the court,⁷⁷ and .31% without prosecution.⁷⁸ 2.96% of the cases were dismissed because of the death of the accused or for other reasons, and in 1.79% the accused failed to appear for trial and their bail was forfeited. 4.54% of the cases resulted in an acquittal by the jury, so that an additional 29.91% of the cases were eliminated in the trial stage.⁷⁹

In 19.58% of the cases the accused pleaded guilty to the crime with which they were charged, and in 4.28% of the cases, to lesser offenses.⁸⁰ In 5.84% of the cases the accused were convicted by the jury of the offenses with which they were charged and in 1.48%, of lesser offenses.⁸¹ Thus, only 31.18% of the total number of arrests resulted in convictions either of the offenses with which the accused were charged or of lesser offenses.⁸²

⁷⁵If the grand jury fails to indict it returns what is called a 'No Bill', that is, it says in effect that there is no bill of indictment, but if the grand jury finds that there is reasonable ground for believing the accused to be guilty of the crime with which he is charged, it returns a 'True Bill', that is, it says in effect that the bill of indictment is true.

⁷⁶In some jurisdictions the prosecutor is required to get the court's approval of the dismissal. He has to make a motion to dismiss, setting forth the grounds for dismissal. Usually it is granted after only very perfunctory consideration by the judge who relies heavily upon the prosecuting attorney so that, in effect, it is the prosecutor who decides whether or not the case should be dismissed. And this, of course, is true whenever and wherever the prosecutor can dismiss without getting the court's approval.

⁷⁷Presumably because the judge was of the opinion that the law or the evidence was such as not to warrant his submitting the case to the jury.

⁷⁸Presumably because the aggrieved person failed to press the charges, or because witnesses had disappeared, etc.

⁷⁹The very small proportion of the cases eliminated by the jury should be noted.

⁸⁰There is some reason to believe that in many cases a plea of guilty to a lesser offense is the result of negotiations between the prosecuting attorney and the accused or his counsel. Moley has dubbed this practice justice by compromise. See his *Politics and criminal prosecution*, Ch. VIII. Of course, bargains of this sort are not necessarily against the public interest. However,

ments reached the jury.

⁸²Other studies have showed both larger and smaller proportions of convictions.

XV. HOW MANY OR WHAT PROPORTION OF THE TOTAL NUMBER OF CONVICTIONS APPEALED FROM IN A GIVEN JURISDICTION IN A GIVEN PERIOD RESULTED IN AFFIRMANCES; HOW MANY OR WHAT PROPORTION RESULTED IN REVERSALS AND ON WHAT GROUNDS WERE THE REVERSALS BASED; HOW MANY OR WHAT PROPORTION OF THE CASES REVERSED WERE REMANDED FOR A SECOND TRIAL; AND HOW MANY OR WHAT PROPORTION OF THE CASES REMANDED RESULTED IN CONVICTION.

A number of studies answer one or more of these questions. Thus, the Illinois crime survey showed that in the ten year period 1917-1927 approximately 700 criminal cases were before the Supreme Court of that State. Of these, 410 or 59% resulted in affirmances and 283 or 41%, in reversals. The Court affirmed 38% of 33 convictions for operating a confidence game, 42% of 26 convictions for receiving stolen property, and 79% of 87 convictions for robbery.⁸³ The number of cases of each class reversed and the principal grounds of reversals are set forth in the following table.⁸⁴

The Illinois survey also showed that of 291 cases reversed and remanded for a new trial, only 15.8% resulted in convictions. 222 of the cases were not tried a second time.⁸⁵

Similar studies are those conducted by Vernier and Selig,⁸⁶ and the Missouri crime survey.⁸⁷

⁸³The Illinois crime survey, p. 116. The same information is given for the other categories of crimes involved in these appeals. It is difficult to discover what the significance of such information is. This seems to be a perfect illustration gathering of insignificant data.

⁸⁴*Op cit*, p. 117. It is difficult to discover the significance of such data, or at least enough to warrant the time and effort involved in this kind of study. The matter is not cleared up by the investigator's discussion of their significance. (See pp. 181-189.) Bettman interprets these data as showing "that the affirmances tended to increase and the reversals to decrease as the gravity of the crime increases. We find remarkably few reversals upon the constitutional privileges or technical points of procedure about which most of the published and professional discussions have taken place." National Commission, Report on prosecution, p. 149.

⁸⁵*Op cit*, pp. 181, 189. This is attributed in large part to the lapse of time and the resulting disappearance of witnesses and the 'coldness' of the evidence.

⁸⁶The reversal of criminal cases in the Supreme Court of California (1928) 2 So. Calif. L. Rev. 21.

⁸⁷Missouri crime survey, p. 222. See also Note (1929) 42 Harv. L. Rev. 566, 567, fn. 3, and Howe, Comment on decision in criminal cases in 1924 (1926) 14 Ky. L. J. 124.

[illegible]

XVI. OF THE TOTAL NUMBER OF CASES OR OF FELONY CASES ENTERING THE PRELIMINARY HEARING OR SOME SUBSEQUENT STAGE OF PROSECUTION IN A GIVEN JURISDICTION IN A GIVEN PERIOD, WHAT PROPORTION OF ALL THE CASES, WHAT PROPORTION OF THE CASES IN SELECTED CITIES, AND WHAT PROPORTION OF THE CASES IN SELECTED RURAL DISTRICTS, RESULTED IN CONVICTIONS; BY WHAT METHODS WERE THE REMAINING CASES DISPOSED OF, AND WHAT PROPORTIONS WERE DISPOSED OF BY EACH METHOD.

Typical of such studies are those conducted by the New York Crime Commission and by the Virginia crime survey.⁸⁸ However, the latter is distinguished for the care exercised in selecting the years to be investigated and in sampling the cases for those years. In other studies of this character the rural and urban districts were differentiated chiefly in terms of the large cities of the state and the remainder of the state. Little effort was made to distinguish among the selected cities or among the selected rural counties, or to compare the selected rural counties with the remaining rural counties. Moreover, the years to be investigated were selected on the basis of some more or less arbitrary interval, such as five years. In the Virginia survey, however, the judicial statistics for the whole State were examined and what were regarded as typical years were selected on the basis of that study. The State was then divided into six geographical regions. The counties of the State were classified into large counties, average counties and small counties on the basis of population. An attempt was then made to choose in each area two large, two average and two small counties which had characteristics similar to those of the entire State. In order to insure a fair sampling, the population, both white and negro, the per capita cost of education, the value of all farm products per capita, the value of manufactured products, the assessed value of all taxable property, and other characteristics of the counties which constituted the sampling were compared with the other counties in the same area and with the entire State.

⁸⁸Report of the sub-commission on statistics. Albany: The Crime Commission of New York State, 1928, pp. 68-77, and Criminal justice in Virginia, pp. 76-93, where the results are set forth.

XVII. OF THE TOTAL NUMBER OF CASES ENTERING THE TRIAL STAGE IN A GIVEN JURISDICTION IN A GIVEN YEAR, IN WHAT PROPORTION WERE THE ACCUSED REPRESENTED BY "27 POLITICAL LAWYERS" AND IN WHAT PROPORTION BY OTHER COUNSEL; WHAT PROPORTION OF EACH OF THESE CLASSES RESULTED IN CONVICTIONS; BY WHAT METHODS WERE THE REMAINING CASES OF EACH CLASS DISPOSED OF; AND WHAT PROPORTION OF EACH CLASS WAS DISPOSED OF BY EACH METHOD.

This study was conducted by the Cleveland crime survey.⁸⁹ The investigator made a list of the attorneys who appeared most frequently in criminal cases in the year in question and submitted this list to a well-known attorney in Cleveland who, on the basis of his general information, selected the 27 attorneys in question as those who had political associations and connections which justified their being classed as political lawyers.

XVIII. OF THE TOTAL NUMBER OF CASES ENTERING THE TRIAL STAGE IN A GIVEN JURISDICTION IN A GIVEN PERIOD, IN WHAT PROPORTION WERE THE ACCUSED REPRESENTED BY COUNSEL ASSIGNED BY THE COURT AND IN WHAT PROPORTION BY COUNSEL WHOM THEY RETAINED; WHAT PROPORTION OF EACH OF THESE CLASSES OF CASES RESULTED IN CONVICTIONS; BY WHAT METHODS WERE THE REMAINING CASES OF EACH CLASS DISPOSED OF; AND WHAT PROPORTION OF EACH CLASS WAS DISPOSED OF BY EACH METHOD.

Typical of such studies is that conducted by the Cleveland crime survey.⁹⁰

XIX. OF THE TOTAL NUMBER OF CASES TRIED BY THE COURT WITH A JURY AND BY THE COURT WITHOUT A JURY IN A GIVEN JURISDICTION IN A GIVEN YEAR, WHAT PROPORTION OF EACH CLASS RESULTED IN CONVICTIONS AND WHAT PROPORTION IN ACQUITTALS.

Typical of such studies are those made by the Illinois crime survey⁹¹ and by the survey of the judicial system of Maryland.⁹²

⁸⁹Cleveland crime survey, p 244, where the results are :

⁹⁰Cleveland crime survey, p 311, where the results are

⁹¹Illinois crime survey, p 43

⁹²Study of the judicial system of Maryland, pp. 14-15.

Goldberg made a similar study⁹⁸ in which he classified his cases also into those in which the accused were represented by counsel appointed by the court and those in which they were represented by counsel whom they retained. Goldberg found that trial by court without a jury results in a slightly larger proportion of convictions than trial by the court with a jury; that where the accused are represented by counsel appointed by the court the proportion of convictions is slightly larger than where they are represented by counsel whom they retain; and that, of the cases tried by the court without a jury, a much larger proportion results in convictions where the accused are represented by counsel assigned by the court than when they are represented by counsel whom they retain. Goldberg concluded that assigned counsel do not exert as much effort for their clients as retained counsel and that the judges penetrate technicalities better than juries. He also concluded that it is possible that those defendants who do not have enough money to retain counsel are the novices or the "group most guilty of the offenses charged".

XX. OF THE TOTAL NUMBER OF PERSONS CONVICTED OF FELONIES IN A GIVEN YEAR IN A GIVEN JURISDICTION (A) BY TRIAL AFTER PLEADING NOT GUILTY, (B) BY PLEAS OF GUILTY AFTER HAVING FIRST PLEADED NOT GUILTY, (C) BY AN INITIAL PLEA OF GUILTY, AND (D) BY A PLEA OF GUILTY TO A LESSER OFFENSE, WHAT PROPORTIONS RECEIVE PENITENTIARY SENTENCES

Typical of these studies is that conducted by the Missouri crime survey which found that, in selected urban counties, 80.28% of the defendants who were convicted after a plea of not guilty were sentenced to the penitentiary; that 71.17% of the defendants who pleaded guilty after first having pleaded not guilty were sentenced to the penitentiary; that 41.99% of the defendants who initially pleaded guilty were sentenced to the penitentiary; and that 34.46% of the defendants who pleaded guilty to a lesser offense than that with which they were charged were sentenced to

⁹⁸Optional waiver of jury in felony trials in Recorder's Court, Detroit, Michigan J. Crim. Law and Criminol., 1931, 21, 41-121, see also Goldberg, Felony trials Michigan counties J. Crim. Law and Criminol., 1931, 22, 566-575.

the penitentiary.⁹⁴ Findings of this character are interpreted as indicating bargaining between the defendants and the prosecutors or courts as the result of which the defendants agree to plead guilty and the prosecutors or courts agree that the defendants shall receive lighter sentences.⁹⁵

XXI. WHAT PROPORTION OF THE FELONY AND MISDEMEANOR CASES IN A GIVEN JURISDICTION IN A GIVEN PERIOD, CLASSIFIED ACCORDING TO THE LENGTH OF TIME REQUIRED TO DISPOSE OF THEM, RESULTED IN CONVICTIONS, EITHER BY PLEA OF GUILTY OR BY TRIAL.

Typical of such studies is that conducted by the Virginia Crime Survey.⁹⁶ Some of the findings of this study are embodied in the following table:

Under three months.....	1,633	2,320	2,723
Percentage, guilt established.....	55	63	66
Three to six months.....	390	877	291
Percentage, guilt established.....	22	13	38
Six to nine months.....	87	147	117
Percentage, guilt established.....	17	29	35
Over nine months.....	187	233	124
Percentage, guilt established.....	11	14	28

XXII. OF THE TOTAL NUMBER OF PROSECUTIONS INITIATED BY INDICTMENT AND OF THE TOTAL NUMBER OF PROSECUTIONS INITIATED BY INFORMATION IN GIVEN JURISDICTIONS IN GIVEN PERIODS, WHAT PROPORTION OF EACH CLASS RESULTED IN THE ESTABLISHMENT OF GUILT.

Moley has conducted such a study.⁹⁷ He sets forth his findings in seven tables which we have consolidated into the following table:⁹⁸

⁹⁴Missouri crime survey, p. 315.

⁹⁵See, in this connection, Kitchelt and Farrow, *op cit.*, p. 414

⁹⁶*Op. cit.*, p. 121.

⁹⁷Moley, The initiation of criminal prosecutions by indictment or information (1931) 29 Mich. L. Rev. 403.

⁹⁸Our percentages are different from Moley's since we have combined several of his tables. Moreover, Moley averaged his percentages for the various jurisdictions and we have weighted them in a manner of which the following is an example. In order to ascertain the proportion of informations filed in a given jurisdiction in a given year which resulted in the establishment of guilt, we have determined the total of these informations and the total of the informations resulting in the establishment of guilt, and our percentage is the ratio which the latter bears to the former.

PROPORTION OF CASES RESULTING IN "SUCCESSFUL" PROSECUTION

	Selected States Infor- mation	States Indict- ment	Non-Metro- politan Areas Infor- mation	Indict- ment	Large Cities Infor- mation	Indict- ment
Total Cases	9,452	30,307	3,211	16,877	3,559	12,294
	100%	100%	100%	100%	100%	100%
Plea Guilty	51.22	26.98	56.59	34.17	39.90	16.76
Plea Guilty (lesser offense)	4.14	9.49	3.86	4.15	4.66	16.82
Convicted	11.29	14.88	7.94	14.76	18.72	14.88 ⁹⁹

XXIII. WHAT PROPORTION OF THE CASES PRESENTED TO THE GRAND JURIES IN GIVEN JURISDICTIONS IN A GIVEN PERIOD, CLASSIFIED AS LIQUOR CASES AND NON-LIQUOR CASES, THE LIQUOR AND NON-LIQUOR CASES BEING IN TURN SUB-CLASSIFIED INTO SPECIFIC CATEGORIES OF CRIMES, WERE INITIATED BY THE PROSECUTING ATTORNEYS AND WHAT PROPORTION BY THE GRAND JURIES; IN WHAT PROPORTION OF EACH CLASS AND SUB-CLASS DID THE GRAND JURIES RETURN TRUE BILLS AND

⁹⁹Moley realizes as well as anyone both the methodological difficulties which such studies involve and the insignificant character of the findings in which they result. For example, with respect to the problem of obtaining a fair sampling he said: "In the prosecution of similar studies in the future it is hoped that the whole question of sampling may be considered in detail. It may be that more pertinent factors should be considered than geographical location and density of population—the criteria given most weight in studies made up to this time. A single year selected from a series of years may be very unrepresentative. In this present article, for example, it was found that the figures collected by the New York Crime Commission for 1926 were seriously, but for our purposes not fatally, distorted on account of the headlong rush of defendants to plead guilty and be sentenced before the Baumes fourth-offender law became operative on July 1st. Frequently a prosecuting office will dispose by *nolle prosequi* or otherwise in a single year of an accumulation of 'dead' cases. It is a truism, however, that as a sample is broadened the influence of these variations becomes less important. All of this points to the tremendous importance to the cause of research in law administration of a real system of judicial statistics, which, of course, exists nowhere in the United States. Such a system established in a state and supported by public authority would provide complete and continuous information. Until this is done such research as this present article is little more than a primitive foray into the wilderness." (*Op cit.*, p. 408, fn. 7a). With respect to the significance of his findings he said "The statistical method followed in this article does not yield a final definitive answer to the questions under consideration. This should be fully acknowledged and understood. Vast numbers of pertinent factors can not be subjected to statistical analysis. While this study deals for the most part with precise data and to an extent uses the statistical method, it does not aspire to the magic in these days identified with the word 'scientific'. Established and sophisticated scientific disciplines would quite properly view askance the rough and empirical judgments upon which certain aspects of our procedure depend. In this as in much of present day social science many items are tentative and experimental rather than exact. We have already shown this to be true of our choice of samples." (*Ibid.*, pp. 410-411.)

IN WHAT PROPORTION NO BILLS; IN WHAT PROPORTION OF THE CASES IN WHICH THE GRAND JURIES RETURNED TRUE BILLS AND IN WHAT PROPORTION OF THE CASES IN WHICH THEY RETURNED NO BILLS DID THE PROSECUTING ATTORNEYS DISAGREE WITH THE ACTION OF THE GRAND JURIES.

Morse has attempted to answer these among other questions.¹⁰⁰ In order to obtain what he referred to as "objective data" Morse prepared and sent a data card to 1,237 prosecuting attorneys in 23 states of whom 162 reported to him. The prosecutors were requested to fill out a card for each case considered by a grand jury during the fall and winter terms of 1929-30. The prosecutor was asked to designate on each card whether or not he would have initiated a prosecution if he had been operating under the information system, the theory being that this would provide a basis for comparing what the prosecutor would have done under the information system with what the grand jury actually did do.

The prosecutors reported a total of 7,414 cases. Among Morse's findings are the following:

(1) Of the 7,414 cases, 77.97% were non-liquor cases and 22.03% were liquor cases; of the non-liquor cases, 57.10% were crimes against property and 24.79% crimes against the person; of the liquor cases "sale" was the most common charge and "possession", the second most common.

(2) Of the 7,414 cases, 353 or 4.76% were initiated by grand juries; of these 353 cases the grand juries failed to indict in 20.40%; of these 353 cases, 5.63% were liquor cases and 4.51% non-liquor cases.

(3) Of the 7,061 cases initiated by the prosecutors, the grand juries failed to indict in 16.57%, from which Morse concluded that prosecutors are not more likely to initiate investigations of cases in which indictments should not be returned than are the grand juries.

¹⁰⁰A survey of the grand jury system (1931) 10 Ore. L. Rev. 101, 217, 295.

(4) In 6,119 of the 7,061 cases initiated by prosecutors, the prosecutors recorded what disposition they would have made of the cases had they been operating under the information system. Of the 6,119 cases, 5,176 resulted in indictment and 943 in no indictment. Of the 353 cases initiated by grand juries, in 334 the prosecutors recorded what disposition they would have made of the cases had they been operating under the information system. Of these 334 cases, 267 resulted in indictment and 67 in no indictment. Of the cases initiated by the prosecutors which did not result in indictments, the prosecutors disagreed with the grand juries in about 20% of the cases, that is, the prosecutors thought that indictments should have been returned. Of the 5,176 cases which did result in indictments, the prosecutors disagreed with the grand juries in 2.53% of the cases, that is, the prosecutors thought that indictments should not have been returned. Thus, in only 315 cases or 5.15% of the 6,119 cases initiated by prosecutors did the prosecutors disagree with the grand jury.

(5) Of the 67 cases initiated by the grand jury which did not result in indictments, the prosecutors disagreed with the grand jury in 11.94% of the cases. Of the 267 cases initiated by the grand jury which resulted in indictments, the prosecutors disagreed with the grand jury in 9.36%.

(6) Of a total of 6,453 cases, the prosecutors disagreed with the grand jury with respect to only 348 or 5.39%.

(7) Of the 7,061 cases initiated by prosecutors, in only 206 or 2.92% were indictments returned for different offenses from those for which the accused were bound over.

Morse attempted to combine what he calls the "quantitative statistical method" with the questionnaire method in the hope that the two methods would supplement and check each other. He therefore sent questionnaires to 2,694 judges in 48 states and received replies from 545 in 41 states. 30% of these were received from information states and 70% came from indictment states. The judges were taken from the supreme courts, the trial courts

and courts of limited jurisdiction. On the basis of the "objective data" and the answers to the questionnaire, Morse reached the following, among other conclusions:

(1) The personnel of committing magistrates and prosecutors should be improved. Often committing magistrates are not learned in the law and many prosecutors are young and inexperienced.

(2) There appears to be no difference generally between the indictment and the information as regards the thoroughness of the initial investigation of cases by prosecutors.

(3) The indictment method causes considerable delay in prosecution with the resultant weakening of the state's position. The information system is decidedly superior to the indictment method from the standpoint of speed. Here there were 313 answers expressing this opinion as against 147 expressing the contrary opinion.

(4) As demonstrated by Moley's material,¹⁰¹ the information method is more efficient than the indictment method. This is shown by the fact that on the basis of the cases studied, there is a larger proportion of convictions under the information system and more pleas of guilty to the offense charged. To this Morse adds that his survey showed that a majority of the judges were of the opinion that the information system is the more efficient. As a matter of fact, 203 judges expressed the opinion that there was no difference in the convictions obtained as between information and indictment, while 36 thought that more were obtained by the indictment method and 23 that more were obtained by the information method.

(5) Grand juries tend to stamp with approval, and often uncritically, the wishes of the prosecuting attorney. At best, the grand jury tends to duplicate the work of the committing magistrate and prosecutor. Most of the judges in indictment states answering the questionnaire were of the opinion that grand juries

¹⁰¹See p. 288, *supra*.

rarely return indictments which are not recommended by the prosecutor and rarely refuse indictments recommended by the prosecutor. Grand juries in some jurisdictions consider cases too hastily while, in others, they devote ample time to the cases. 107 judges from indictment states and 50 judges from information states were of the opinion that the prosecutor so influences the grand jury that it usually follows his suggestions without careful consideration, but 114 were of the opposite opinion. 73 were of the opinion that while the grand jury usually follows the prosecutor's suggestions, it does so only after careful consideration.

(6) The grand jury can be an effective instrument for the investigation of political fraud and corruption and serves as a constant warning to public officials that they cannot escape public scrutiny.

(7) The information system centers upon the prosecutor the responsibility for initiating criminal prosecutions. The indictment method provides him with a scapegoat.

(8) The cumulative effect of the evidence supports the conclusion that, from the standpoint of efficiency, economy and the fixing of the responsibility, the dual method should be preferred to the indictment method alone.

XXIV. WHAT WAS THE FINANCIAL COST OF EXECUTING SPECIFIC PROCESSES OR OF MAINTAINING SPECIFIC INSTITUTIONS IN GIVEN JURISDICTIONS IN A GIVEN PERIOD.

(a) Most of the information which we have regarding both the direct and the indirect cost of crime to the community is contained in the Report on The Cost of Crime of the National Commission.¹⁰² It deals with the cost of the administration of the criminal law by the federal government, the cost of state police forces, the cost of state penal and correctional institutions, and the cost of the administration of the criminal law in American

¹⁰²As one critic has said, the more appropriate title would have been "The Economic Consequences of Crime". See H. F. Taggart, Comment (1931) 30 Mich. L.

cities.¹⁰³ The Commission's study is by far the most elaborate that has been made of these matters. It found that of the institutions of criminal justice, the cost of maintaining the police was the greatest, and that of maintaining penal and correctional institutions was the next greatest. The costs of maintaining these and other institutions in various states and cities were compared.

(b) Aumann investigated the relative cost of the public defender system and the system of assigned counsel.¹⁰⁴ In Cleveland, in 1920, assigned counsel handled 528 cases at a cost to the public of \$32,500.00. In Los Angeles, in 1917, the public defender handled 522 criminal cases and several thousand civil cases at a cost of from \$20,000.00 to \$25,000.00. It was estimated that in Columbus the public defender cost \$1.78 for each person whom he assisted in some way, in 1927, without taking into account the cost of maintaining his office. In their study of the minor courts in Connecticut, Kitchelt and Farrow¹⁰⁵ found that the cost per capita of criminal justice for the entire population in Hartford was \$5.48, in New Haven \$6.47, and in Bridgeport \$6.00. This was compared with a per capita cost of \$5.00 in Baltimore, a figure which was based upon an estimate of the director of the criminal justice association of Baltimore. They also found that the cost per case handled in the Police Court was \$6.33 in Hartford, \$6.93 in New Haven, and \$8.26 in Bridgeport; that the cost per case handled in the court of Common Pleas in New Haven was \$49.19, and in Bridgeport \$90.59; that the cost per case handled in the Criminal Superior Court was \$123.99 in Hartford, \$190.28 in New Haven, and \$212.06 in Bridgeport; that the cost of each arrest made by the police was \$72.10 in Hartford, \$84.40 in New Haven, and \$154.41 in Bridgeport; and that the cost of maintaining each prisoner in the county jail was \$29.04 in Hartford, \$46.42 in New Haven, and \$89.40 in Bridgeport.

¹⁰³It also deals with private expenditures for protection against crime, private losses due to criminal acts, and the indirect losses to the community due to the existence of crime.

¹⁰⁴The public defender in the Municipal Court of Columbus. J. Crim. Law and Criminol., 1930, 21, 393-399.

¹⁰⁵*Op. cit.*, p. 394.

(c) By means of a questionnaire sent to judges from whom 337 replies were received, Morse assembled certain data relating to the amount of grand jurors' and witnesses' fees, mileage fees, and the fees of bailiffs and court reporters in proceedings before the grand jury.¹⁰⁶ In this way he obtained data for 244 counties in states in which the indictment was the only method of accusation and for 49 counties in states in some of which the information was the only method of accusation and in others of which both the indictment and information were employed. He found that the average cost per county of the items in question in the 244 counties was \$1,466.00, and in the 49 counties \$809.00. Such items as salaries and jail costs were not included.

XXV. WITH WHAT CELERITY WERE SPECIFIC PROCESSES OR SPECIFIC VARIETIES OF THE SAME PROCESS EXECUTED IN GIVEN JURISDICTIONS IN GIVEN PERIODS.

The following are representative studies which have attempted to answer this question in one or another form:

(a) What was the time required to dispose of felony cases in a given jurisdiction in a given period after they reached the trial stage?

Typical of these studies is that made by the Georgia survey.¹⁰⁷ The findings of this study are embodied in the following table.

DISPOSED OF BY FULTON SUPERIOR COURT

Plead Guilty.....	.....
Convicted ... ..	.....
Punished .....	..
Acquitted ..	.....
Nol Prossed .	.....
Other Disposition .....	..
Not Punished .	... ..

¹⁰⁶*Op cit*, p 341

¹⁰⁷*Op. cit.*, p 187

(b) What was the time interval between bindover or commitment by the magistrate to the grand jury and action by the grand jury in a given number of cases in a given jurisdiction?

Typical of these studies is that conducted by the Oregon crime survey.¹⁰⁸ The findings of this study are embodied in the following table.

TIME INTERVAL FROM BINDOVER TO GRAND JURY DISPOSITION¹⁰⁹

Grand Jury Disposition	No of Cases	Median No of Days	Total Range of Days
Not true bills	116	24 21	0-194
True bills	505	19 83	0-158
Summary	621	20.69	0-194

(c) What were the average or median time intervals between the various stages in the prosecution of the felony cases which came before the supreme court in a given jurisdiction in a given period?

Typical of these studies is that conducted by the Missouri crime survey.¹¹⁰ The investigator examined 1,087 cases which came before the Supreme Court of that State in the period 1915-1924 and embodied his findings in the following table.

¹⁰⁸See Morse, A survey of the grand jury system (1931) 10 Ore L Rev 295, 296.

¹⁰⁹Of the significance of these data Morse says "The correct explanation of this difference between the time intervals is difficult to determine. Possibly the difference indicates that the longer the delay between bindover and grand jury hearing, the more difficult it is to secure an indictment. Possibly Table XXVII should be interpreted as showing that grand juries are inclined to return true bills and that they ponder doubtful cases a considerable length of time before relinquishing their inclination to indict. However, it is probable that the difference in the time interval cannot be accounted for in the grand jury hearing itself but rather in the interval before the case is presented to the grand jury. Prosecutors, for instance, may tend to defer presenting to grand juries those cases in which the evidence is weak hoping that the delay will help persuade the accused to agree to plead guilty to a lesser offense. There may be other explanations as well, but whatever the explanation, it should be noted that for the cases studied there is a longer delay of about five days between bindover and grand jury action for no true bill cases than for true bill cases" (pp 296-297).

¹¹⁰Missouri crime survey, p 261. The New York Crime Commission has made a similar study comparing the average or median time intervals between the various stages of prosecution in New York City, the large up-state cities, small cities and rural districts. See Report of the sub-commission on statistics Albany The Crime Commission of New York State, 1928, p 105.

	Average	
	Months	Days
Crime committed to date information filed	3	27
Information filed to disposition by trial court .	5	27
Disposition by trial court to appeal perfected .	7	19
Appeal perfected to hearing by Supreme Court .	5	16
Hearing to disposition by Supreme Court	1	27
Crime committed to disposition by Supreme Court . .	24	27

(d) What were the average or median time intervals between the arrest or the accusation (by indictment or information) and the final disposition of a given number of felony cases in a given jurisdiction by each of the methods by which they were disposed of?

Typical of these studies is that conducted by the Cleveland crime survey.¹¹¹ The findings were embodied in the following table.

AVERAGE TIME PER CASE BY CLASSES OF DISPOSITION

Disposition	From inferior courts ¹	Original indict- ments	From inferior courts ¹	Original indict- ments
Guilty on first plea	26 1	16 4	9 8	49 4
Change of plea to guilty .	62 5	26 2	42 0	44 9
Change to plea guilty lesser offense	65 6	37 7	42 2	53 2
Guilty of felony by jury	71 7	74 6	52 8	113 8
Not guilty of felony by jury	83 8	55 6	54 7	62 3
"Nolled" because of defendant's sen- tence or imprisonment .	84 6	44 0	56 7	75 6
Dismissed or discharged on motion or demurrer	106 0	63 5	58 7	65 7
"Nolled" on all counts, no reason assigned	99 8	124 6	75 5	134 5
"Nolled" after conviction or dis- agreement	181 4	.	163 7	.
Dismissed, want of prosecution	215 0	293 3	245 0	298 3
No bill by grand jury	29 3			..
Arrest to true bill	24 4			...

¹The column for cases coming from inferior courts is the more reliable because based upon approximately 10 times as many cases as the original indictments

¹¹¹Cleveland crime survey, p. 304. A similar study was made in the Illinois crime survey, comparing the median time intervals between the filing of the complaint in the magistrate's court and final disposition by each of the methods of disposition in Illinois and Milwaukee. See Illinois crime survey, p. 94.

XXVI. WHAT WAS THE RELATIVE CELERITY WITH WHICH SPECIFIC ALTERNATIVE PROCESSES OR SPECIFIC VARIETIES OF THE SAME PROCESS WERE EXECUTED IN GIVEN JURISDICTIONS DURING GIVEN PERIODS.

The following are representative studies which have attempted to answer this question in one or another form.

(a) W. J. Wood studied 147 trials in which the defendants were represented by attorneys whom they had retained, and 58 trials in which the defendants were represented by public defenders, for the purpose of ascertaining the average duration of the trial in each class of cases.¹¹² The average duration of the trial of cases tried by attorneys retained by the accused was 1.626 days; the average duration of the trial of the cases tried by the public defenders was 1.017 days.¹¹³

(b) Goldberg studied the felony cases in the Detroit Recorder's Court from September, 1927 to September, 1928. He classified them as cases in which a jury had been waived and cases in which a jury had not been waived. His purpose was to ascertain the median time interval in each class of cases between the filing of the complaint and final disposition by whatever method. He found that in 952 cases in which a jury had been waived the median interval in days was 31.78, and that in 634 cases in which a jury had not been waived the median was 33.28.¹¹⁴

(c) In 1919 the Michigan legislature provided for the reorganization of the criminal courts of Detroit, merging the Police Court with the Recorder's Court under the name of the latter. After the new court had been in operation a year, Mandel made a comparative study of the speed with which cases were tried in the new court and in the court which it had succeeded. The following year he added to his study the results of the second year of its operation. He prepared a table showing the time required

¹¹²Necessity for public defender established by statistics J. Crim. Law and Criminol., 1916, 7, 230-235

¹¹³Wood discovered also that whereas the attorneys retained by the accused filed numerous demurrers and motions of various sorts, few of which were granted, the public defenders filed practically none

¹¹⁴Optional waiver of jury in felony trials in Recorder's Court, Detroit, Michigan. J. Crim. Law and Criminol., 1930, 21, 41-121, at 73.

to dispose of cases in the years 1919, 1920 and 1921. Moley made a similar study in 1927, employing the same methods that Mandel had used. The following table combines the findings of both investigators, except that it omits numbers and gives only the percentages.¹¹⁵

TIME REQUIRED FOR THE DISPOSITION OF FELONY CASES IN
DETROIT IN 1919, 1920, 1921, AND 1926

Weeks	1919	Cumulative Percentages		
		1920	1921	1926
1	2	38	66	10
2	5	52	72	23
3	10	61	77	33
4	15	68	84	40
5	21	74	90	46
6	27	79	94	52
7	34	83	96	56
8	40	86	97	59
9	59	87	98	62
65-90 days	66	93	100	67
90-270 days	80	100		99
270-610 days	100			100

Moley points out that in the interval between the period covered by Mandel's study and that covered by his own, the quality of the judges had deteriorated.

XXVII. WHAT WAS THE PHYSICAL OR MENTAL HEALTH OF SPECIFIC CONVICTS IN SPECIFIC PRISONS IN GIVEN JURISDICTIONS IN GIVEN PERIODS; WHAT WAS THE VALUE OF THE PRODUCTS OF THEIR LABOR; WHAT WAS THE NUMBER OR PROPORTION OF THEM WHO ESCAPED.

It will be observed that nearly all of the studies which we have thus far surveyed have dealt with pre-conviction processes. There have been, however, a few studies of post-conviction processes and of the institutions by which they are executed which have attempted to answer questions such as those we have just stated.

¹¹⁵Mandel, Appraising Detroit's new criminal court. *National Municipal Review*, 1921, 10, 550-553; Moley, *Our criminal courts*, p. 86.

(a) Hobhouse and Brockway report that the suicide rate among prisoners is three times as great as in the general population.¹¹⁶ The frequency of suicide among prisoners from twenty to twenty-five years of age is nearly five times that of the same age group in the general population, and juvenile suicides are twelve times as frequent as in the general population. Furthermore, the tendency to suicide is much greater in the first few weeks of imprisonment than later on. Sieverts has collected data on German prisoners.¹¹⁷ He found that the suicide rate is much higher during detention before conviction than during detention after conviction, and that the suicide rate is much higher during the first few days of imprisonment than later.

(b) The most competent statistical study of the relation between imprisonment and insanity is that made by Hobhouse and Brockway.¹¹⁸ They found that the ratio of insanity to the number of sentences increases with the length of the sentence imposed. This applies both to those recorded as unsound and to those recorded as sound when admitted to prison. In all sentences under one month, the number of those certified insane, who were recorded as sound at the time of reception, is less than 1 per 10,000. This rate rises to 7.1 per 10,000 at three months and continues to increase much more rapidly than the length of sentence. Prisoners sentenced for one year have a rate of 40, those sentenced for five years a rate of 375, more than nine times the rate for sentences of one year, and those sentenced for twenty years a rate of 2444, or about sixty-one times the rate for sentences of one year. Of the cases of insanity among prisoners sentenced to less than a year's imprisonment, the majority come from those recorded as unsound at reception; the cases of insanity among prisoners sentenced for a year come about equally from those recorded as sound and those recorded as unsound at reception; and of the cases of insanity among prisoners sentenced for

¹¹⁶English prisons today London Longmans, Green and Co., 1922, pp 550-559

¹¹⁷R. Sieverts, Die Wirkungen der Freiheitsstrafe und Untersuchungshaft auf die Psyche der Gefangenen Hamburgische Schriften zur Gesamten Strafrechtswissenschaft, Heft 14, s 53 Berlin J. Bensheimer, 1929

¹¹⁸*Op cit.*, pp. 534-49

more than a year the greater number come from those recorded as sound at reception. The only conclusion to be drawn is that imprisonment is a determining factor in a large number of cases of insanity. However, two conflicting interpretations can be made of these figures: either criminals are frequently disposed towards insanity and the longer they remain in prison the greater is the probability that this tendency will become overt, or imprisonment drives the inmates to insanity. Warden Lawes has claimed that the proportion of prisoners who become insane in Sing Sing has been reduced by modification of specific prison policies from 48 per year to 10 per year,¹¹⁰ which suggests that it is not imprisonment as such but the specific policies used within the prison which must be examined for their causal relation to the development of insanity.

Section 3. Critical Summary.

Having completed our survey of empirical studies in the administration of the criminal law, we shall now attempt an appraisal of the validity and significance of the findings in which they have resulted

It is impossible to estimate with precision the accuracy and reliability of non-quantitative descriptions, either of the processes or of the institutions of criminal justice. We must depend here entirely upon the skill and competence of the observers.¹²⁰ We have some indication of their reliability in the reciprocal corroboration of the reports of different investigators who have observed the same process or the same institution. Furthermore, the simplicity of the observations that are made and the fact that the investigators employ concepts of common sense in order to define what they observe, make it probable that they are sufficiently valid as descriptions of what they purport to describe;¹²¹

¹¹⁰L. E. Lawes, *Life and death in Sing Sing* New York Doubleday, Doran and Co., 1928, pp. 80-81

¹²⁰See Moley, *Report to Columbia Criminological Survey*, p. 236. Moley says that while the value of this method of research must not be underestimated, its validity, of course, depends upon the experience and powers of observation and analysis of the individual who employs it.

¹²¹We have referred to Moley's characterization of the method of direct observation as that of the artist. We take it that what Moley means is that just as the

as such they do not have to satisfy very high requirements of accuracy and reliability.

Whether or not they possess sufficient validity as a basis for inference is, however, another matter. They have been used as a basis for inference in two ways. In the first place, institutions and processes which have been studied at particular times and particular places have been assumed to be typical of all institutions and processes of the same types, and it has been inferred that the characteristics of the institutions and processes observed are those of all institutions and processes of the same class. Such inferences are not justified unless the characteristics which have been observed have been accurately observed, and unless the processes and institutions observed constitute a fair sample of the institutions and processes of that class. In the next place, such non-quantitative descriptive knowledge has been used as a basis for generalizations regarding the efficiency, measured by one or another criterion, of these institutions and processes. Such inferences are unjustified unless the data of observation are valid and unless they are of such a character that common sense is able to interpret them significantly.¹²² We shall later consider the capacity of common sense to make significant interpretations of descriptive knowledge of the institutions and processes of criminal justice.

It is obvious that the validity of the findings in which quantitative researches in criminal justice have resulted is dependent upon the accuracy and reliability of the census data upon which they have been based. As we have pointed out, those conducted by the enumerative or tabulative method have been based entirely upon police, judicial and penal statistics or upon official reports which were themselves based upon such statistics. While in some instances investigators who have constructed mortality tables have gone to the court files for their census data, usually

artist selects for portrayal that which appears to him to be significant, so the investigator, who observes a process or institution of criminal justice, selects for description those characteristics of the process or institution which appear to him to be significant.

¹²²This must be so since, as we have pointed out, we have no knowledge of the etiology of administrative efficiency.

they, too, have relied upon police and judicial records. It is notorious that, as a whole, police and judicial statistics are of doubtful accuracy and reliability and it must follow, therefore, that the validity of the findings of researches conducted by the census method is questionable.¹²³

Valid crime statistics are important for two reasons. In the first place, they are essential to the proper administration of the various institutions of criminal justice, that is to say, they serve an administrative purpose.¹²⁴ In the next place, as we have seen, they are essential to the conduct of research both in the field of criminal justice and in the field of criminology. There are three chief difficulties in obtaining valid crime statistics: (1) It is difficult to devise record systems which will serve both administrative and theoretical purposes and which can be kept accurately and without too great difficulty by the not too well trained officials of criminal justice. (2) Because of the very considerable differences in the criminal and administrative codes of the various American jurisdictions and in the administrative practices which obtain therein, it is difficult to find a classificatory scheme which will result in uniform crime statistics. (3) Even if these two difficulties could be surmounted, it would still be difficult to insure that records would be accurately and honestly kept.

The subject of crime statistics has received a great deal of attention in the United States in recent years. As the result of the efforts of the Committee on Uniform Crime Records of the International Association of Chiefs of Police, police records have been greatly improved in this country. Under the direction of that Committee, police recording systems and a manual for compil-

¹²³For a discussion of the past and present situation relative to crime rates and other crime statistics and with respect to police, judicial and penal records in this country and abroad, see National Commission, Report on criminal statistics, Mead, Police statistics *Annals Am Acad. Pol and Soc Science*, 1929, 146, 74-95. Sellin, Crime. *Encyclopedia of the Social Sciences*, 4, 563-569, Robinson, History and organization of criminal statistics in the United States New York Houghton Mifflin Co., 1911; Moley, The collection of criminal statistics in the United States (1928) 26 Mich. L. Rev. 746, and the reports of the various crime surveys.

¹²⁴Thus Smith points out in *Chicago Police Problems* that without accurate knowledge of the volume and geographic distribution of crime in a given city the police department of that city is unable to plan the most effective use and distribution of its personnel.

ing and recording crime rates have been prepared¹²⁵ and adopted by a very large number of American police departments.¹²⁶ A similar study of judicial records has recently been completed and published in tentative form.¹²⁷ There remains, however, a great deal of work to be done in the field of crime statistics before we will have accurate and reliable police, judicial and penal records.¹²⁸ It is recognized that the work of the Committee on Uniform Crime Records represents but a fragment of a complete police recording system.¹²⁹ Only a beginning has been made in the study of judicial records in America, and there are many difficult problems in connection with the records of penal and correctional institutions which still await solution.¹³⁰

¹²⁵Committee on Uniform Crime Records of the International Association of Chiefs of Police, *Uniform crime reporting: a complete manual for police*. New York: J. J. Little and Ives Co., 1929. This work was done under the direction of Bruce Smith.

¹²⁶One of the chief purposes of this work has been to obtain accurate and uniform records of the more serious crimes known to the police so as to obtain an adequate index to the volume of such crime. It is generally agreed among the best informed persons in the field of crime statistics that crimes known to the police provide a more reliable index to the volume of crime than arrests, convictions, or commitments to penal institutions, but the opinion is not unanimous. See Warner, *Crimes known to the police* (1932) 45 *Harv. L. Rev.* 307. Professor Warner takes the position that police records of crimes known to the police can be neither accurate nor uniform because of differences in laws, in administrative practices, and in the competency and honesty of the recording officials. He apparently is of the opinion that accurate criminal court statistics would furnish a more reliable index of the volume of crime, for the reason that while records of crimes known to the police must in the nature of things represent individual opinions, the judicial records contain information regarding what actually occurs in the course of the administration of the criminal law. L. V. Harrison has prepared a reply to Warner for publication.

¹²⁷Hotchkiss and Gehlke, *Uniform classification for judicial criminal statistics*. Baltimore: The Johns Hopkins Press, 1931.

¹²⁸It is generally agreed that the penal statistics are the best that we now have, due largely to the work of the Bureau of the Census of the Department of Commerce of the United States. See the following publications of the Bureau: *Prisoners*, 1923 (Published 1926); *Prisoners in state and federal prisons and reformatories*, 1926 (Published 1929); *Prisoners in state and federal prisons and reformatories*, 1927 (Published 1931); *The prisoner's antecedents*. Statistics concerning the previous life of offenders committed to state and federal prisons and reformatories (Published 1929). All of these were published by the Government Printing Office.

¹²⁹A complete system has been devised for the police department of Cincinnati by the Bureau of Municipal Research of that city. The New York Bureau of Municipal Research devised a complete record system for the New York City Department in 1916 and, subsequently, for the departments of other cities. The system prepared by the Committee on Uniform Crime Records is a complete system of crime records, although it does not constitute a complete police record system.

¹³⁰Crime statistics are important for purposes of public education and propaganda. It is important that the public should know such things as the volume and geographic distribution and the cost of crime. Such information will do more than anything else, except, perhaps, a very dramatic and unusually shocking crime like the Lindbergh kidnapping, to make the public understand the social importance of the control of

It will be understood, of course, that we do not mean to say that the census data employed in research in criminal justice are intrinsically defective, but only that the data which have been employed are of low validity. Let us assume the validity of the data in order to ask about the significance of the findings in which such research has resulted. We shall consider the significance of the quantitative findings first, and return later to a consideration of the non-quantitative findings.

In the first place, it is difficult to interpret the averages and percentages, and hence the ratios, in terms of which the quantitative findings are stated. As we have previously pointed out, an average by itself is an incomplete description of the distribution of quantities of which it is a summary. Averages must always be supplemented by measures of deviation or variability which indicate the character of the distribution. No conclusion can be drawn from a comparison or ratio of averages unless we know how accurately the averages represent the distributions, and the degree to which the distributions do or do not overlap. A difference between averages is valid and significant only in the light of its probable error. Even though these quantitative findings are merely statistical descriptions, the statistical qualifications indicated are indispensable to any interpretation of their meaning. *These qualifications are everywhere lacking* Averages are reported unaccompanied by indices of the variability of the distributions, and averages are compared without the question of the validity of their differences being raised or answered. In short, from a statistical point of view, the ratios which constitute the major findings of the crime surveys are thoroughly ambiguous.

In the second place, it can be said that these quantitative findings have no significance whatever except as descriptive knowledge which will answer simple questions of the kinds which we enumerated in our survey of these researches. Answers to these

criminal behavior and of efficiency in the administration of the criminal law, although it must be confessed that the public attitude appears to be largely one of indifference. There are occasional outbursts of public wrath and indignation against criminal depredations and official corruption and inefficiency, but the outbursts are all too sporadic and the indignation all too temporary.

questions do not enable us to answer questions regarding the efficiency of any process or of any variety of any process of criminal justice, or the comparative efficiency of the same process or of the same variety of a process at different times and places, or the relative efficiency of alternative processes or different varieties of the same process. Nor do they enable us to answer questions regarding the causes of the inefficiency of criminal justice. These researches are, therefore, insignificant in the sense that they do not afford solutions of any of the problems of efficiency which are the major theoretical problems in criminal justice. Nevertheless, efforts have been made to interpret them as if they were studies of the efficiency of the processes of criminal justice as measured by the criteria of certainty and celerity.¹⁸¹ The first obstacle to the interpretation of mortality tables or of other researches in criminal justice as measurements of efficiency is that we lack standards of efficiency. If all crimes that were committed were discovered and all persons committing them were convicted and subjected to treatment, and if no innocent persons were convicted, the processes of criminal justice could be said to be perfectly efficient as measured by the criterion of certainty. However, we know perfectly well that in the nature of things perfect certainty in the administration of the criminal law is impossible of attainment, and it is extremely doubtful that we desire to attain perfect certainty.¹⁸² Even though we were able accurately to deter-

¹⁸¹The most experienced investigators in the field do not make this error. Both Bettman and Moley, for example, have expressly pointed out that mortality tables are not subject to this interpretation. Moley has said that it is extremely doubtful whether a mortality table can measure efficiency at all and that to interpret mortality tables in this way is to miss the entire point of what the various steps in the administration of the criminal law are designed to accomplish, namely, the separation of cases which deserve further consideration from those which should be dismissed. See Report to Columbia Criminological Survey, pp 246-247. In the same way, Bettman has said that there is a danger that mass statistics may be over-interpreted, and that a small proportion of convictions is as compatible with the conclusion that an excessive number of innocent persons were arrested as that an excessive number of guilty persons escaped. See Report on prosecution, pp 54-55.

¹⁸²It is impossible (1) because we desire to achieve conflicting or inconsistent ends by means of the processes of criminal justice; (2) because it is necessary to employ human beings as instrumentalities in their execution; and (3) because of difficulties inherent in the nature of proof. It is doubtful that we desire perfect certainty in view of our toleration of what we can be reasonably sure is a much lower degree of efficiency, and because of such popular reactions as that manifested in connection with the recent Massie Case in Hawaii. In that case the criminal law

mine the ratio between the number of crimes committed and the number of convictions,¹⁸⁸ it would be impossible to measure the efficiency of criminal justice until we have defined the degree of certainty which we wish to attain.

We are in no better situation if we attempt to measure the efficiency of criminal justice or of any of its processes by other criteria. We have already pointed out that the concept of celerity is too vague and ambiguous to serve as a criterion of efficiency. We can, of course, discover the time that it takes to execute the processes of criminal justice, but unless we know how much time should be taken or how much time we desire to be taken, that will furnish us with no indication of their efficiency. Obviously, it would be an extremely difficult matter to formulate schedules for the execution of the processes of criminal justice, although, of course, in extreme cases our common sense will tell us that their execution has been unduly delayed. In the same way, we can measure the cost of maintaining the institutions of criminal justice and of executing its processes, but to know their cost is not to know their efficiency as measured by the criterion of economy in the expenditure of public funds, although, again, our common sense may tell us in extreme cases that the cost is excessive. In order to measure the efficiency of criminal justice by this criterion, it will be necessary not only to establish methods of cost accounting and cost standards for the various institutions of criminal justice, but also to determine what we are willing to spend in the administration of the criminal law.¹⁸⁴

was administered with the highest degree of efficiency, much to the dissatisfaction not only of great masses of citizens but of public officials, many of whom frequently assert with great assurance that disrespect for one law breeds disrespect for all laws

¹⁸⁸The same thing is true of any of the major or subordinate processes of criminal justice. The processes of detection, identification and apprehension, for example, would be absolutely certain if the police discovered all crimes that were committed and arrested or otherwise apprehended all of the persons who committed them. We know, however, that in the nature of things that is impossible. Not being able to attain perfect certainty, we must be satisfied with less than that. If we would measure police efficiency by this criterion we must define the degree of certainty which we expect of the police process.

¹⁸⁴The same argument can be made with respect to all of the criteria which are employed to measure the efficiency of *post-conviction* processes, except, perhaps, the criterion of security from escape. It may be that the ratio between the total number of persons confined in institutions and the number of those who escape therefrom is

Not only do we lack precisely defined criteria of efficiency, but, as we have already pointed out, such criteria as those of certainty, celerity and economy may be inconsistent. We do not know with what degree of celerity the processes of criminal justice must be executed in order to function with certainty, nor do we know what expenditures are reasonably necessary in order to insure that they function both with certainty and celerity.¹⁸⁵ Moreover, the existence of what we have referred to as tangential ends, that is, ends which are not themselves means to punishment, incapacitation, reformation or deterrence, increases the difficulty of formulating standards by which the efficiency of criminal justice may be measured. Among these tangential ends are, as we have said, the protection of citizens against the arbitrary action of officials, the protection of the innocent persons who are charged with crime against conviction, and the protection of what are conceived to be important individual rights, such as the privilege against self-incrimination and immunity from unreasonable searches and seizures. We have already referred to what Dean Pound has called the checks upon prosecution,¹⁸⁶ consisting of a series of mitigating devices, constitutional guaranties and procedural requirements which are in large part designed to achieve these tangential ends. As Dean Pound points out, "the safeguards which experience has shown to be necessary for the protection of the innocent may at times be interposed as obstacles by the

In other words, these checks upon prosecution render

a measure of their efficiency in this respect, but if it is among the ends of these processes to preserve the physical and mental health of prisoners, to provide them with recreation and education, to utilize their labor for productive purposes, and so on, and if these ends are not themselves regarded as means to reformation, it is extremely difficult to see by what criteria the efficiency of post-conviction processes is to be measured in respect to them

¹⁸⁵There is some evidence that the more slowly the processes are executed, the less will be the ratio between the number of prosecutions instituted and the number of convictions. See p. 288, *supra*.

Of course, we do not need research to tell us that the greater the interval of time between the institution of a prosecution and the trial of the accused person the more likely it is that witnesses will die or become unavailable for other reasons and that for this and like reasons a prosecution will become more difficult.

¹⁸⁶See p. 245, *supra*.

¹⁸⁷National Commission, Report on prosecution, p. 20. Dean Pound points out that while a certain number of mitigating devices and opportunities of escape offered to accused persons are necessary to the proper administration of criminal justice and

the processes of criminal justice both less certain and less speedy, which is only another way of saying that there is an inconsistency among the various ends which we try to achieve in the enforcement of the criminal law. Obviously, this increases the difficulty both of establishing criteria of efficiency and of measuring the efficiency with which the criminal law is administered. We cannot measure its efficiency solely in terms of certainty, celerity and economy. We can measure it only by the extent to which we achieve all of the ends which we desire to attain in the course of criminal justice.

However, even if it be assumed that the certainty of the processes of criminal justice is a criterion of their efficiency, it is an unsatisfactory one because it is impossible to measure their certainty with precision, either by the construction of mortality tables or in any other way, because of two *unknown* factors upon which the measurement depends. As we have said, criminal justice could be regarded as perfectly certain if all guilty persons were convicted and if no innocent persons were convicted. In order to measure the certainty of criminal justice we would, therefore, have to know the number of crimes which are committed, the number of persons who are convicted and acquitted, and, finally, their guilt or innocence. Of these three factors two cannot be known. We do not now know and we have never known the volume of crime.¹⁸⁸ The second unknown factor is the guilt

while many of the constitutional guaranties have abundantly justified themselves as needed securities of individual liberty, these checks upon prosecution are often used as so many pieces to be played by habitual offenders in the game of criminal justice, and the practitioners in the criminal courts have become expert in playing them to defeat the ends of law (See pp 20-27) On the other hand it may be, as Dean Pound says, that some of these checks upon prosecution developed under conditions which no longer obtain and are now unnecessary for the protection of citizens against arbitrary official action or of the innocent against unjust conviction. There is a widespread belief, for example, that the privilege against self-incrimination could be abolished, or at least substantially modified, without defeating such purposes. The great problem, of course, is to work out some basis of adjustment which will render the tangential ends of criminal justice as little inconsistent with its other ends as possible.

¹⁸⁸We have already referred to the lack of a reliable index of the volume of crime. We have pointed out that while it is the consensus of the best informed opinion that the category of "crimes known to the police" is the most reliable index of the volume of crime and while, as the result of the work of the International Association of Chiefs of Police, both the system and the keeping of police records in the United States have vastly improved, we still lack accurate and complete information

or innocence of persons who are convicted or acquitted of the crimes with which they are charged. The acquittal of innocent persons is an end of criminal justice as well as the conviction of guilty persons. Therefore, we cannot measure the certainty of criminal justice by the ratio between the total number of crimes and the number of convictions. We must know, in addition, that all of the convicted persons are guilty and that all of the acquitted persons are innocent. *This we cannot know.*¹³⁹ Usually, the only knowledge which we have of guilt or innocence is the probable knowledge which we possess as the result of the trial of accused persons. It would be a vicious circle to use this knowledge as a basis for determining the certainty of the administration of the criminal law.¹⁴⁰

Because of these unknown factors and for other reasons, it is likewise difficult to measure the certainty with which any of the major pre-conviction processes is executed. For example, we can attempt to measure the certainty of the processes of detection, identification and apprehension in terms of the ratio between the total number of crimes that are committed or the total number of crimes known to the police and the number of arrests made by the police. But we do not know how many crimes are committed. We do not know the validity of police records of crimes known

with respect to crimes known to the police. In the first place, not all American police departments have adopted the record systems devised by the International Association and, in the next place, this system applies only to the more serious crimes. There are also questions as to the accuracy and uniformity of the records of those police departments which are now recording crimes known to the police, questions which grow out of differences in the way criminal behavior is classified in different jurisdictions and the competence of the recording personnel. We do not say that it is impossible to establish a reliable index of the volume of crime; we merely say that there is none today.

¹³⁹As we have pointed out, we may know in isolated cases that innocent persons have been convicted or that guilty persons have been acquitted, but in the nature of things such knowledge will be confined to isolated cases.

¹⁴⁰There is an additional complication. Frequently persons accused of crime are convicted, either as a result of a plea of guilty or as a result of a trial, for lesser crimes than those of which they are accused. It is clearly extremely difficult to determine whether the processes of criminal justice have miscarried in such cases. Difficult questions of fact are frequently involved in the determination of the question whether a given individual has behaved in the given way in which he is charged to have behaved; and difficult questions of law are frequently involved in the determination of the question whether such behavior is criminal.

to them.¹⁴¹ Even if we did have that knowledge, it would not follow that police efficiency could be measured in terms of the ratio between the crimes known to them and the number of arrests. The police may not only arrest innocent persons, but they may arrest innocent persons without reasonable cause to believe them to be guilty.¹⁴² In order to determine police efficiency, therefore, we must know whether or not the persons whom they arrest are guilty or, at least, whether or not there were reasonable grounds to believe them to be guilty; but, as we have pointed out, this can usually be known only in terms of convictions and acquittals. A person may be convicted although innocent in fact, or acquitted although guilty in fact. His acquittal may or may not mean that he was innocent; and it may or may not mean that the police did not have reasonable grounds for believing him to be guilty.¹⁴³

¹⁴¹There is an added difficulty here. Many instances of behavior reported to the police as criminal may not be criminal at all. Indeed they may never have occurred. We have already pointed out how difficult it is in many cases, both as a matter of fact and as a matter of law, to determine whether or not a crime has been committed. Moreover, while it is quite probable that the police learn of the unlawful homicides, burglaries, robberies and similar crimes which are committed, it is quite likely that there are many other crimes committed of which they do not learn, such as embezzlement, larceny, adultery and so on.

¹⁴²It would seem that in no event is police efficiency to be measured by the ratio between the number of crimes known to them and the number of persons arrested who are found guilty. The processes of detection, identification and apprehension are not supposed to result only in the arrest of guilty persons. We know that in the nature of things that is impossible, and that the police will arrest a certain number of innocent persons. We do not make the police the final arbiters of questions of guilt or innocence. We expect them to arrest persons when they have reasonable cause to believe that these persons have committed crimes. That is the duty which the administrative code imposes upon them.

¹⁴³We experience the same difficulty in measuring the certainty of the subsequent pre-conviction processes. We can attempt to measure the certainty of the process of the preliminary hearing in terms of the ratio between the number of persons who are accorded a preliminary hearing and the number of persons who are bound over by the magistrate to await the action of the grand jury. But there is no way of determining whether or not the persons discharged as the result of the preliminary hearing should have been discharged. They should have been discharged unless the magistrate had reasonable cause after hearing the evidence to believe them to be guilty. It is as much the purpose of the preliminary hearing to bring about the release of such persons, as it is to bring about the commitment of persons who are probably guilty of the crimes with which they are charged. For the same reason, the

number of persons bound over to the grand jury and the number of indictments returned by the grand jury. The certainty of the processes of prosecution which follow accusation cannot be measured by the ratio between the number of persons indicted and the number of persons who are convicted, since their object is not only to convict the guilty but to acquit the innocent.

Furthermore, it is clear that although the efficiency of any of the processes of criminal justice depends upon the efficiency with which its constituent processes are executed, we cannot discover the efficiency of these processes by ascertaining the efficiency of the complex process into which they enter.¹⁴⁴ It is clear, too, that if any of the processes of criminal justice can be executed only after other processes have been executed, its efficiency will be conditioned by the efficiency with which prior processes have been executed. For example, we may discover that the process of prosecution results in the conviction of only a small portion of the persons who commit crimes and that it is in that sense inefficient, but we will not know whether and to what extent its inefficiency is to be attributed to the inefficiency of the processes of detection, identification and apprehension, or to its own inefficiency.

In short, it seems impossible to measure the efficiency of criminal justice or any of its processes; and if this is true, it is obvious that we cannot measure comparative efficiency, that is, the efficiency of the same process or of the same variety of a process as executed at different times or places, or relative efficiency, that is, the efficiency of alternative processes or of different varieties of the same process.¹⁴⁵

The measurement of comparative and relative efficiency presents an additional difficulty. Even if we could measure the efficiency of a single process, we could not measure comparative or relative efficiency unless in some way we were able to control all other factors which might influence the efficiency of the same process when executed at different times or places, or that of alterna-

¹⁴⁴For example, the process of prosecution is composed of the processes of the preliminary hearing, the accusation, the trial and the appeal, and each of these is in turn a complex process. If we know that the ratio between the number of persons prosecuted and the number convicted is small, and if we accept that ratio as measuring the efficiency of the processes of prosecution as a whole, we will not know the efficiency of any of its constituent processes.

¹⁴⁵Any mortality table which compares the results of criminal justice or of any of its processes in the same jurisdiction for different years, or compares the results of the same processes or of the same varieties of processes in different jurisdictions, may be regarded as studies of comparative efficiency. In the same way separate tables can be put together and comparisons made. By constructing a single table or by putting different tables together, attempts can be made to determine the relative efficiency of alternative processes or different varieties of the same process.

tive processes. Our common sense tells us that the efficiency of any process is a function of the nature of the organization, the quality of the personnel and the character of the physical facilities of the institution by which that process is executed, and also of certain factors in the environment which are extraneous to the institution. The efficiency of the same process at different times and places and of alternative processes may vary with variations in these factors. Therefore, in order to measure comparative or relative efficiency, we must be able not only to measure the efficiency of a single process but to control these factors. Obviously, we are unable to do so.

The significance of the knowledge which is recorded in the quantitative findings of research in criminal justice is, therefore, extremely limited. We have already indicated what this limited significance is, by enumerating some of the questions which knowledge of this sort is able to answer. It has been said that research conducted by the census method has shown, in addition, the relative importance of the various crimes in the administration of the criminal law, by showing the number of prosecutions for each; the importance of youth in the problem of crime, by showing the median age of those charged with crime; the necessity for executive control of the judicial and administrative personnel, by showing how the policies and practices of officials within the same jurisdiction vary; the great importance of the plea of guilty as a means of obtaining convictions; the declining importance of both the grand and the petit jury in terms of the proportion of the total number of cases which are finally disposed of by them; the dominant importance of the prosecutor and the relative insignificance of the judge in terms of the number of cases which are eliminated by each of those officials; the large number of different steps into which a prosecution may be divided and the large number of ways by which it may be terminated. All of this knowledge, however, is descriptive.

Although the descriptive knowledge contained in the quantitative findings of research in criminal justice has little theoretical significance, it has some practical importance. It is useful in

locating problems which cannot be located by non-quantitative descriptive knowledge, although it will not answer them. Prior to the crime surveys, we knew much of what they have revealed, but our knowledge often lacked precision. For that reason, we did not realize the existence of what now appear to us to be problems requiring further study, such, for example as the problem of regulating the prosecutor's control over the processes of prosecution. Descriptive knowledge of this sort is also of practical importance, since it can be used with rhetorical effectiveness in urging proposals for the reform of the administration of the criminal law.¹⁴⁶ In the next section we shall discuss such proposals and their basis in knowledge.

The non-quantitative descriptive knowledge in which research in criminal justice has resulted, has a greater theoretical significance than the quantitative and, hence, is of greater practical utility. It has greater theoretical significance since, unlike the quantitative, we can interpret it significantly, even though we have no scientific knowledge of the etiology of administrative efficiency. We have seen that common sense is unable to interpret descriptive knowledge about criminals and their environments and, therefore, unable to control criminal behavior except by chance. But in the light of our common sense knowledge about the nature of such a practical undertaking as the administration of the criminal law and of the conditions of its efficiency, we are able to interpret non-quantitative descriptive knowledge of the institutions and processes of criminal justice and, as we shall see, to do much toward increasing the efficiency of criminal justice, if we really wish to do so.

¹⁴⁶Moley has said that most of the facts discovered by the crime surveys were well known before the surveys found them out and published them in a new synthesis. He states as their chief value that they serve the purpose of arousing public interest in the enforcement of the criminal law; that they provide public officials with many suggestions of new working methods, and that they lead to the reform of administration. Report to Columbia Criminological Survey, pp 224-227. He also points out, however, that the world of political strategy has found the survey method useful for gaining time, that it makes it possible to defer action and may make it unnecessary to come to grips with a disagreeable decision. Bettman says that the mass statistics contained in the mortality tables lend themselves to tentative or working hypotheses and indicate the parts of administration which should be further examined. Report on prosecution, p. 55.

Our common sense tells us that institutions which are badly organized or administered, or which have a dishonest or incompetent personnel, or which have inadequate physical facilities, will not function efficiently; and that this is true of the institutions of criminal justice as of other institutions by which practical affairs are conducted. It is this knowledge which makes it possible for us significantly to interpret the non-quantitative findings of research in criminal justice, for such findings are always descriptive of the institutions of criminal justice, of their structure, their personnel, or their equipment. The quantitative findings, on the other hand, rarely describe these institutions. As we have seen, they describe, rather, the results of the processes of criminal justice, and in terms which are susceptible to so many interpretations that we are unable to say which of them is the correct interpretation. We are unable to say whether or not they mean that the processes of criminal justice are inefficient and, if inefficient, to what their inefficiency is attributable.

Most of the quantitative research, completed and projected, is not only insignificant; it is also unnecessary and pretentious. It is unnecessary because, since we cannot interpret it significantly, it has little practical utility, and because accurate non-quantitative descriptive knowledge, as we shall see, is sufficient for our practical purposes. It is pretentious in its imitation of what is mistakenly supposed to be scientific method; the quantitative character of its findings should not conceal its true nature as undirected descriptive work of indeterminate validity.

Chapter X:

INCREASING THE EFFICIENCY OF CRIMINAL JUSTICE BY COMMON SENSE

We are assuming, for the moment, that it is desired to administer the criminal law as efficiently as possible; and we turn to the question whether or not we now have or can obtain knowledge which will be found useful in efforts to increase the efficiency of criminal justice. In order to increase the efficiency of any practical activity we have only better to adapt the means we employ to the ends we seek. The relation of means to end is one which is capable of being translated into a causal relationship. Etiological knowledge is, therefore, useful in solving practical problems of efficiency. Such knowledge may be either scientific knowledge or common sense knowledge. Generalizations derived from common experience are sometimes able to answer etiological questions. When these generalizations can be used to interpret descriptive knowledge about the various aspects of our practical undertakings, we are able to contrive more efficient means for achieving our ends.

Technology, as we have said, is the application of scientific knowledge to practical problems. In contrast to technology, what we have called trial and error is the way in which we proceed in the solution of urgent practical problems when we lack knowledge. The phrase 'trial and error' indicates that we are as likely to fail as to succeed, whereas when we are guided by science in our practical undertakings there is a high probability of success, a probability commensurate with the validity of our knowledge. We have distinguished between common sense generalizations and individual opinions. In the light of this distinction, it can be said that trial and error is a procedure guided only by opinions. The application of common sense knowledge to practical affairs is clearly distinguished from processes of

trial and error; it is more like technology in that the probability of the success of such undertakings is commensurate with the probability of our common sense knowledge. Scientific knowledge is, however, superior to common sense knowledge; not only is the probability of its propositions determined by reference to definite evidence, but its analytic structure indicates the interrelation of a field of variables. Practice directed by common sense knowledge is uncertain to the extent that common sense does not afford us an analysis of the correlation of all the relevant variables. Such practice, therefore, falls between technology, on the one hand, and trial and error, on the other.

Since we lack scientific knowledge of the etiology of administrative efficiency, our attempts to increase the efficiency of criminal justice must either be directed by common sense knowledge or they are merely efforts at trial and error. We have seen that we cannot control criminal behavior by common sense knowledge; that in the absence of scientific knowledge of the etiology of crime all of our efforts to control criminal behavior are trial and error attempts. We are unable in terms of common experience to make significant etiological interpretations of the descriptive knowledge of criminals and their environments which research has yielded. But common sense is able to answer questions regarding the causes of administrative efficiency or, to say the same thing differently, the causes of administrative inefficiency. Thus, we know that the efficiency of criminal justice is a function of certain factors which are essential elements in the processes of criminal justice and of certain factors in the environments in which the institutions of criminal justice operate. The generalizations which express this knowledge can be used significantly to interpret the descriptions which investigators have given us of the institutions and processes of criminal justice. We are, therefore, able to propose or to undertake ways of increasing the efficiency with which the criminal law is administered.

Criminal justice is now efficient to some degree. To some extent we are detecting crimes, apprehending and convicting criminals, and subjecting them to treatment in the modes pre-

scribed by the criminal law. By common sense we have been able to contrive means which are to some degree adapted to our ends. We should have been unable to do this, just as we have been unable to control criminal behavior except by trial and error, had we no knowledge of the conditions of administrative efficiency.

The administration of the criminal law is only one of the activities which comprise public administration or the administration of government. Public administration has been defined as the management of men and materials in the accomplishment of the purposes of the state.¹ This makes very clear the similarity of the administration of government to the administration of business enterprises. Business, it may be said, is the management of men and materials in the accomplishment of the purposes of the entrepreneur.² There is no empirical science of business any more than there is an empirical science of public administration;³ and if we had no common sense knowledge of the conditions of administrative efficiency we should be unable successfully to transact business. But the efficiency with which we conduct business enterprises is perhaps our proudest boast and our chief glory.

Business is conducted and the criminal law is administered by institutional instrumentalities. Whether they be the institutions of business or of criminal justice, their elements are the same; an institution is made up of its structure, its personnel and its equipment, of men and materials and of the organization by which they are managed. Our common sense tells us that the efficiency with which an institution will execute either the processes of business or those of criminal justice is a function of the manner in which it is organized and administered, of the character, experience, skill, training and similar characteristics

¹See Moley, Report to Columbia Criminological Survey, p. 211, quoting Leonard D. White to that effect. White says, "This definition emphasizes the managerial phase of administration and minimizes its legislative and formal aspect."

²Of course, we are not saying that the administration of government and the administration of business are activities which are identical in character, but only that they are analogous. We shall later refer to some of their differences.

³There is a rational science of politics. What is today known as political science and which purports to be an empirical science is, like sociology, a body of descriptive knowledge plus common sense generalizations.

of its personnel, of the kind of equipment with which it is provided, and of certain factors in the environment in which it exists. Our common sense tells us that as one or more of these factors vary, it is highly probable that the manner in which the institution discharges its functions will vary; and it also indicates to us how we can and must vary those factors if we would cause the institution to function more efficiently. Knowledge which is descriptive of the elements of the institutions of criminal justice and of the relevant factors in their environments is therefore highly useful if we would attempt to increase the efficiency with which the criminal law is administered,⁴ since we can interpret such knowledge in terms of common experience. We do not have to await the development of scientific knowledge of the etiology of administrative efficiency in order to be able to proceed to improve the administration of the criminal law.

This point can be made entirely clear by reference to current proposals for the modification of the institutions and processes of criminal justice, of which the following is a brief summary.

(1) Proposals for the modification of the structure and organization of institutions. It is proposed that some agency, such as a ministry of justice, be established in each state for the supervision, coordination and direction of the various institutions of criminal justice, in order to concentrate the responsibility for, and the direction of, the administration of the criminal law in a single body; that police departments be so organized that the chief or other executive head can supervise and direct the various police activities, and that to this end the number of departmental units should be so limited and related activities should be so grouped, that a small number of bureau chiefs can exercise daily supervision of these activities under the general control of the executive head; that the responsibility for, and the control and direction of, all prosecutions in each state be centralized in the

⁴Such knowledge is the kind of knowledge which in the last chapter we designated *non-quantitative* descriptive knowledge, as we there pointed out, it is rarely quantitative. It results from research conducted by direct observation and rarely from that conducted by the census method.

office of the attorney general or a director of prosecutions;⁵ that some agency, such as a judicial council, be created to exercise administrative control of the judicial establishment; and that another agency be created to supervise and direct the administration of probation, parole and other modes of non-institutional treatment.

If it is known that a number of institutions with related activities necessarily participate in the conduct of any practical enterprise, such as the administration of the criminal law; that these institutions are functioning more or less independently of one another and at cross purposes; that the manner in which some of them function is conditioned by the manner in which others function; that responsibility for the conduct of the enterprise is diffused; and that no agency exists for supervising, coordinating and directing the activities of the several institutions, we are able to interpret this descriptive knowledge significantly. We know that such conditions make for administrative inefficiency. Our common sense tells us that if we can find some means for coordinating, supervising and directing the activities of the related institutions, the result will probably be increased efficiency; and our knowledge is such as to enable us to contrive means for that purpose, either those which have been proposed or some other.

In the same way, if it is known that the structure of a single institution, for example, a police department, is such that its executive head cannot supervise and direct the activities of its several parts because of their large number, or that the structure of some other institution, for example, the judicial establishment or a single court, is such that it entirely lacks administrative control and direction, we also know that such conditions operate

⁵In its Report on prosecution, p 11, the National Commission said "Taking the country as a whole, the features which chiefly operate to make the present-day criminal justice in the States ineffective are Want of adequate system and organization in the office of the average prosecutor, decentralization of prosecution whereas law and order have come to be of much more than local concern, diffusion of responsibility, the intimate relation of prosecution to politics, and in many jurisdictions no provision for a prosecutor commensurate with the task of prosecution under the conditions of today."

against administrative efficiency.⁶ Again, our common sense tells us that executive control and direction is essential to the proper functioning of complex institutions engaged in practical activities, and enables us to proceed to devise methods of administrative control.

It has been stated that there are three basic principles of administrative organization which should be applied in the organization of police departments: (1) there should be a unified command, exercised directly and continuously upon the several functions or services; (2) the number of major units should be so limited as to permit general supervision by the executive; and (3) related activities should be grouped so that a small number of bureau chiefs can exercise daily supervision under the general control of the administrative head.⁷ These, obviously, are not propositions of an empirical science; they do not express scientific knowledge of the etiology of administrative efficiency; they are common sense generalizations regarding the conditions of efficiency in the conduct of practical activities.⁸ Business is confronted with such problems daily and succeeds in solving them more or less wisely and intelligently.

(2) Proposals for creating new institutions, for transferring the functions of one institution to another, for more precisely defining the functions of institutions, and for specialization in the discharge of functions. It is proposed that state police forces be established to provide adequate rural policing; that crime prevention units be established in police departments; that the office of the coroner be abolished, the office of medical examiner created and the functions of the former transferred to

⁶In Our criminal courts, Ch XIII, Moley says that our courts should be organized on a business basis, with an executive head having broad powers, and with integration of effort and specialization of cases

⁷Chicago police problems, p 12

⁸It is not too much to say that in the writings of such men as Fosdick and Smith is to be found most of the wisdom needed in order to increase the efficiency of police processes. These men possess the necessary descriptive knowledge, and their long experience of practical affairs in general and of police activities in particular, is such as to enable them to interpret this knowledge significantly and to contrive means for making police departments more effective agencies for the execution of the processes of detection, identification and apprehension.

the latter; that the functions of the police and the prosecutor be more precisely defined and coordinated; that the office of public defender be established;⁹ that the various functions of the prosecutor's office, such as criminal investigation, preparation of cases for trial and their presentation, be executed by specialists within the prosecutor's staff; and that specialized courts, such as traffic, morals, and family courts, be created.

Such proposals as these are obviously based upon knowledge, of greater or less validity, which is descriptive of the organization and personnel of such institutions as the offices of the constable, the sheriff, the coroner, the medical examiner and the prosecutor, the police departments and the courts, and which is also descriptive of their respective functions and of the manner in which they discharge them; and they are based upon common sense knowledge that institutions will probably function ineffectively if they are obsolete, or if their functions are such as unduly to tax their capacity to discharge them, or if their functions overlap, or if functions which demand special skill, experience and training, are being executed by an unskilled, inexperienced and untrained personnel.

In addition to their primary functions of repressing and detecting crime and of identifying and apprehending criminals, police departments have such functions as licensing taxicabs, pawnbrokers, junk dealers, dance halls, etc.; regulating traffic; conducting a public ambulance service; supervising paroled convicts; inspecting public halls and elevators; registering voters; taking a census of the population; examining prostitutes for venereal diseases; operating employment agencies; and so on.¹⁰ While opinions as to the proper scope of the functions of the police may differ, it is obvious to common sense that the greater the number and the more varied the functions which any police

⁹In most jurisdictions indigent persons accused of crime are represented either by assigned unpaid or assigned paid counsel. Report on prosecution of the National Commission, p. 30. While the Commission concluded that "as things go in the average city, the system of assigning counsel is not efficient and is not economical", the Commission nevertheless were unwilling to recommend the general adoption of the public defender system which has worked well, on the ground that the question of adopting it rather than improving the older system must depend on local conditions.

¹⁰Bruce Smith, Report to Columbia Criminological Survey, Manuscript, 1930, p. 7.

department has to execute, in addition to those which are directly related to the enforcement of the criminal law, the more likely it is that the latter will be neglected and that none of them will be discharged with maximum efficiency. The manner in which police departments actually function, confirms common sense in this view.

This problem is typical of those which the proposals which we have just enumerated are designed to solve.

(3) Proposals for changes in the methods employed in managing the institutions of criminal justice, and in their record systems.

It is proposed that a modern system of bookkeeping and accounting and modern methods of office management be installed in the prosecutor's office; that prosecutors adopt uniform regulations with respect to such matters as the *nolle prosequi*, the acceptance of pleas of guilty to lesser offenses, and the other methods of disposing of cases without trial, in order to fix responsibility for such dispositions; that a bureau of statistics be created in each state to standardize police, judicial, penal and other records, and to collect and compile such records, and to publish annually the data relating to the activities of these institutions and to criminal justice in general; that police records be devised which will facilitate administrative control of police departments; that proceedings in the minor courts be conducted with decorum; that they maintain an up-to-date record system; and that they record the reasons why they dispose of cases in one way rather than another.

These proposals are based upon common sense knowledge that careful formulation and standardization of administrative methods and adequate records are essential both to the proper functioning of institutions and their administrative supervision and control, and upon descriptive knowledge, of varying degrees of validity, of the methods of internal administration or management and of the records of the institutions of criminal justice.

(4) Proposals for alterations in the methods of selection, the compensation, the tenure and the training of the personnel of

the institutions of criminal justice. It is proposed that the appointment and tenure of the commissioner or chief of police be based solely upon his ability and efficiency; that policemen be selected on the basis of civil service examinations supplemented by psychiatric tests, and promoted solely on the basis of merit; that their salaries be such as to permit decent living standards and that they be given one day off weekly, an annual vacation, and sick leave with pay, and that reasonable provision be made for accident and death benefits and for a pension; that the members of the professional staff of the prosecutor's office be selected and promoted on a basis of merit, either by civil service examinations or some other method;¹¹ that the legal profession should be so organized in each state as to insure the competency and character of, and discipline among, attorneys who practice in the criminal courts; that judges be selected on the basis of training, experience and temperament, and clerks, bailiffs and other officials attached to the courts, on a civil service basis; that exemptions from jury service be curtailed; and that police and other officials be adequately trained.

Proposals such as these quite obviously proceed upon common sense knowledge, which there is no need to confirm by research, that the manner in which any institution will function is influenced by the character, the ability, the experience and the skill of its personnel, and upon knowledge, of greater or less validity, of the characteristics of the personnel of criminal justice which indicates that many officials are to a considerable degree deficient in those qualities, largely as the result of the operation of political influences in their selection. Such proposals are designed to im-

¹¹In its Report on prosecution, p 13, the National Commission said "In many cities with each new incumbent of the office, and so at regular intervals, a wholly new set of assistants comes in. The most important of a prosecutor's duties may devolve upon these assistants. They come in wholly unacquainted with the pending cases. Often they are quite without experience of what they are to do. Thus they are for a long time in no position to cope with experienced and resourceful professional defenders. By the time they have acquired experience, they are likely to be superseded by a change of political control. The continual and rapid turnover among assistants as well as at the head, and want of any continuous experience, give a great advantage to the habitual practitioner in criminal cases which is enhanced by the latter's connection with local politics and his ability to bring political pressure to bear upon those whose political tenure is uncertain and dependent upon politics."

prove the quality of the personnel of criminal justice by professionalizing the various services, as far as possible, by providing for security of official tenure, by providing for the selection of officials on the basis of their character and competence rather than on the basis of political considerations, by providing inducements, such as higher compensation, which will attract a better type of individual to the public service, and by making provision for the training of officials.

(5) Proposals for changes in the physical equipment and facilities of the institutions of criminal justice. It is proposed, for example, that police departments be equipped with the most modern devices for speedy communication, such as the telephone, the teletype and the radio, and for rapid transportation; and that the prosecutor's office be equipped with adequate physical facilities.

Such proposals are based upon common sense knowledge that the functioning of any institution will be influenced by the character of its physical facilities, and upon descriptive knowledge of the equipment of the institutions of criminal justice which shows that to a considerable extent it is antiquated and obsolete.

(6) Proposals for the modification of the processes or of varieties of the processes of criminal justice.

(a) The processes of detection, identification, and apprehension. It is proposed that upon their arrest persons be taken directly before an examining magistrate and not to the police station, so as to render the use of the third degree impossible; and that the summons be employed instead of the arrest whenever physical custody of the accused is unnecessary to insure his appearance.

(b) The process of bail. It is proposed that bail bond forfeitures be set aside only for cause, and not as a political favor; that bail be denied persons with criminal records who commit serious offenses, and that it be made more difficult for those without criminal records; and that the decision to exact bail or to release an accused upon his own recognizance be

made not arbitrarily, but upon the basis of the necessity for bail to insure his subsequent appearance.

(c) The process of accusation. It is proposed that accusation by information be made alternative to accusation by indictment in felony cases, the supposition being that the grand jury has become a superfluous institution in a large proportion of cases; and that the technical requirements with regard to the form and content of the indictment be relaxed.

(d) The trial processes. It is proposed that the judge conduct the examination of jurors in order to speed up the trial; that he be permitted to comment upon the weight of the evidence and the credibility of witnesses in order to assist the jury in the discharge of their functions; that in the interest of celerity the accused be permitted to waive trial by jury in all except capital cases; that in the interests of certainty and celerity continuances or adjournments of cases be granted only for cause and not as favors; that in the interest of fairness appellate courts be empowered to grant new trials if errors were committed upon the trial or if the evidence of guilt was insufficient, although the accused failed to take the necessary exceptions; that the judge and the prosecutor be permitted to comment upon the failure of the accused to become a witness in his own behalf; that in the interests of certainty the accused be required to notify the prosecutor of the nature of his defense so that the latter may be prepared to meet it; that the state be given the right to appeal in cases in which the accused are acquitted; and that a unanimous verdict of the jury be required only in capital cases.

Proposals for modification of the processes of criminal justice raise questions which are different in character from those raised by proposals for the alteration of the institutions of criminal justice. The latter proceed upon common sense knowledge of the nature of practical undertakings and of the conditions which are necessary to insure their successful consummation, whatever their character. They proceed upon common sense knowledge

that *whatever* the character of the processes of criminal justice, their efficiency will, in part at least, be a function of the characteristics of the institutions by which they are executed; and they propose means for improving the structure, the personnel and the equipment of these institutions. But proposals for the modification of the processes themselves proceed, in some cases, upon the assumption that *whatever* the characteristics of the institutions by which they are executed, one process or one variety of a process is intrinsically better adapted to a given end than another, or, although less well adapted to that end, is better adapted to some other end which we should like to attain.

Thus, proposals that the information be employed instead of, or as an alternative to, the indictment as the method of accusation in felony cases, or that the judge, instead of counsel, examine jurors upon their *voir dire*, or that the judge be permitted to comment upon the weight of the evidence and the credibility of witnesses, or that the accused be permitted to waive trial by jury, are based upon assumptions as to the relative efficiency of alternative processes or of different varieties of the same process as means to the same end. The knowledge which would be most useful to us in the solution of the practical problems raised by proposals such as these, would be knowledge of the relative efficiency of the processes of criminal justice; but, as we have seen, we do not now have and we cannot obtain such knowledge. However, knowledge which is descriptive is not without utility in the solution of such problems. If we have knowledge of the characteristics of the two processes and of the institutional instrumentalities for their execution, and if we have been able to observe the manner in which these institutions execute these processes in specific cases,¹² we shall be able to form common sense judgments regarding their relative efficiency.

On the other hand, proposals that immediately upon his arrest an accused be taken before a magistrate, or that the summons be employed more often instead of the arrest, or that accused per-

¹²Again we wish to point out that such knowledge will usually be non-quantitative and the product of the method of direct observation, and only rarely quantitative knowledge gained by the census method.

sons be more frequently released upon their own recognizance, or taken before magistrates immediately upon their arrest, are not based upon the assumption that the summons or the release of an accused person upon his own recognizance is a more effective method than the arrest or detention in jail or bail of securing his appearance at subsequent stages of his prosecution, or that examination by a magistrate is a more efficient means of obtaining confessions than the third degree. Indeed, we know that it is highly probable that they are less efficient means for securing those ends. But those who make such proposals believe that it is better to employ less efficient means for achieving those ends than unnecessarily to confine large numbers of persons in jail or to obtain confessions by compulsion. Obviously proposals such as these do not raise questions of the relative efficiency of alternative processes or of different varieties of the same process; they raise, rather, questions of the relative importance to us of different ends. Nearly all of the proposals for the modification of those provisions of law which Dean Pound has referred to as checks upon prosecution,¹³ such, for example, as the proposal that the privilege against self-incrimination be restricted in its application, raise such questions.

As we have seen, these are questions as to what our ends shall be, and not questions as to the means which we shall employ to achieve them, and they cannot be answered in terms of knowledge.¹⁴ Indeed, many of the proposals of the first group raise questions as to ends, as well as questions of relative efficiency. This is especially true of proposals for the modification of the processes of prosecution. Nearly always these proposals are debated not merely in terms of the relative efficiency of alternative processes as means to the same end, but also in terms of the probable effect of the proposed modifications upon other ends

¹³See p 245, fn. 9, *supra*

¹⁴As we pointed out in Chapter II, a rational solution of practical problems depends upon knowledge; thus, such questions as what our ends *shall* be can be answered rationally only in terms of knowledge about what they *should* be. But knowledge cannot compel us to approach our practical problems rationally; moreover, the absence of knowledge often forces us to proceed irrationally, by trial and

which we desire to achieve, such as the protection of the citizen against the arbitrary action of officials or the protection of innocent persons who are accused of crime against unjust conviction. Not knowing and being unable to ascertain what these effects will be, we are reluctant to adopt such proposals.¹⁵

Descriptive knowledge—and we possess and can obtain no other at the present time—is, therefore, of the greatest practical utility in attempts to increase the efficiency of criminal justice by reforming its institutions, rather than its processes. Because of our capacity to interpret it significantly, it is highly useful for that purpose, just as it is in attempts to increase the efficiency with which business enterprises are conducted.¹⁶ But we must guard against the following possible misunderstandings of this point.

(1) We must not be understood as having said that the problems which are involved in increasing the efficiency of criminal justice and those which are involved in increasing the efficiency of business are identical. We have said only that they are similar; there are obvious differences as well as obvious similarities. It is more difficult to bring about alterations in the processes and institutions of criminal justice than in those of business. As we have seen, more often than not their alteration is impossible without legislative action. Legislation is a cumbersome and a slow method of reaching decisions as compared with the procedure of the directorates of business enterprises. Because of the

¹⁵There are thus two chief impediments to modification of the processes of criminal justice or to procedural reform (1) our inability to answer with any degree of certainty questions regarding relative efficiency, and (2) the inconsistency of, and our uncertainty regarding, the ends we wish to achieve in the course of the administration of the criminal law. The easier road to administrative efficiency is, obviously, the reform of the institutions rather than of the processes of criminal justice.

¹⁶It is not our purpose to hold up business in general as a model of administrative efficiency. A great many businesses are very inefficiently conducted. The point is that some businesses, which are very large and complex enterprises, are conducted with a very high degree of efficiency, and that the conditions of their efficiency are in general the same as the conditions of the efficiency of criminal justice. The men who conduct those businesses have been confronted by practical problems of the same general character as the problems which confront those who would make criminal justice more efficient, and they have found it possible by c solve them.

rigidity of the administrative code and for other reasons officials have much less freedom of administrative decision and action than the administrators of business. The executives of criminal justice have not the same power as business executives to control the structure, the personnel and the equipment of the institutions which they administer. By and large, their subordinates are chosen for them; and they have no power or a very limited power to discharge or promote or discipline them or to regulate their compensation. Business and business administrators are much less subject to the pressures of social groups. The ends of business are more sharply defined, less complex, less numerous and less inconsistent than those of criminal justice; and, for that reason, it is easier to measure the efficiency of business and of its procedures than of criminal justice and of its processes. Profit and loss are much more definite criteria of administrative efficiency than such concepts as certainty and celerity.

These differences, however, merely make it more difficult to vary the processes and institutions of criminal justice than those of business. They are not differences in the conditions of administrative efficiency; and they do not render it more difficult in criminal justice than in business to ascertain the causes of inefficiency by common sense interpretations of descriptive knowledge.

(2) We must not be understood as having said that common sense knowledge of the conditions of administrative efficiency is as useful in practice as scientific knowledge of the etiology of administrative efficiency would be. While common sense tells us that the efficiency with which the processes of criminal justice are executed is a function of the nature of the processes themselves, of the character of the organization, of the traits of the personnel and of the quality of the equipment of the institutions by which they are executed, and of such environmental factors as the pressures of political and criminal groups, common sense is unable to say in what ways these factors are related to one another or, indeed, completely to enumerate all of the relevant factors. Common sense is, therefore, unable to say how and to what extent variation of one of these factors will cause another

to vary, or how or to what degree administrative efficiency will vary with variations in one or more of these factors. If we had such knowledge we would possess scientific knowledge of the etiology of administrative efficiency, and we should be able to control the processes of criminal justice by methods of technology.

That does not mean, however, that we cannot control them to some extent by common sense. While we may not know the precise extent to which and the precise manner in which the efficiency of criminal justice will vary with variations in the character and the competence of administrative officials, we can be perfectly sure that it is highly probable that the more incorrupt and incorruptible, the more skilled and experienced, and the better trained for their tasks officials are, the more efficiently the criminal law will be enforced.

(3) Our use of the expression 'common sense knowledge' must not be misunderstood. By common sense knowledge of the conditions of administrative efficiency we mean only knowledge of the causes of administrative efficiency which is not scientific, that is, which is not expressed in the propositions of an empirical science and which is the result of common sense observations and inferences rather than of scientific researches.¹⁷ We have not meant to say that such knowledge is the common possession of all men or that those men who possess it, have it to the same degree. We have not meant to say that all men are able significantly to interpret descriptive knowledge of the processes and institutions of criminal justice or that the interpretations of all men who have that capacity are of equal value.

The value of such interpretations depends upon the wisdom, the insight, the understanding, the detachment and the experience of those who make them and, especially, upon experience of the processes and institutions of criminal justice. An expert in this field is not one who possesses scientific knowledge of the etiology of administrative efficiency, for there is no such knowl-

¹⁷The term 'scientific method' is often employed as if it meant only precise observational techniques. Our discussion in Chapter IV makes it clear that while precise observational techniques are indispensable to empirical research, scientific method consists of much more than precise observation.

edge. He is one who possesses rather precise knowledge of the characteristics of the processes and institutions of criminal justice and of its ends, gained by long study and observation; he is, in addition, one who can interpret this knowledge wisely.¹⁸

It is upon such men and upon the descriptive knowledge which they have or can obtain that we must rely in our efforts to improve the administration of the criminal law. Because of its utility in the solution of practical administrative problems, precise and accurate non-quantitative descriptions of the institutions and processes of criminal justice should be the aim of future research in criminal justice.¹⁹ Research by the census method, resulting in quantitative descriptions, should be undertaken with discrimination and only when it gives promise of results capable of significant interpretation.²⁰ The joy which investigators experience when they can express their findings in numbers, in charts, in graphs, and in elaborate tables, does not justify the collection of masses of data of doubtful validity and of little significance.²¹ Too much research has been done which has merely revealed the obvious or has disclosed what we already knew.

Above all, we should realize that we now have enough knowledge to improve the administration of the criminal law, if we really wished to do so. That we do not use this knowledge, is additional evidence that we have no genuine desire to increase

¹⁸He should himself have had first-hand contacts with the enforcement of the criminal law or with the institutions of criminal justice, but not necessarily or even preferably as an official

¹⁹It is significant that the research said to be necessary in criminal justice by such men as Smith, Moley and Sutherland, is chiefly of that character

²⁰For practical purposes, it is, for example, much more useful to know that preliminary hearings are conducted in noisy, crowded court rooms, that they are conducted with great haste, that the presentation of the evidence is casual, careless and unintelligent, that political influences are rampant in the magistrate's court, that the prosecutor does not prepare his cases, etc., than it is to know that the magistrate dismisses 42 or some other percent of the cases

²¹Numbers, and what is popularly called 'statistics', have a rhetorical effectiveness which is both useful and dangerous. An argument or an appeal which is supported by the citation of figures takes on an appearance of factuality, whether or not the numbers represent valid quantitative knowledge, whether or not the numbers have any significance whatsoever. Thus, the mass of census data collected by the crime surveys can be used rhetorically to persuade an audience that criminal justice is inefficient, even though the numbers tell us nothing of the sort.

the efficiency of criminal justice. To postpone serious efforts at reform until we have more knowledge is not a praiseworthy exhibition of the scientific temper; it is rather a manifestation of our unwillingness or incapacity to make the alterations in the processes and institutions of criminal justice which are clearly indicated by the knowledge which we now have; too often we resort to research as a means of escape from exigent practical problems. A single example will serve for purposes of illustration. We know perfectly well that the quality of the personnel of criminal justice is inferior, and inevitably so, in view of our methods of selecting, promoting and training officials, and in view of our apathetic and indifferent attitude toward official malfeasance and incompetence.²² But we make no really serious effort to improve the quality of the personnel of criminal justice. We seem to have reconciled ourselves to mediocrity and venality in public office if, indeed, we do not desire them, and to have convinced ourselves that by modifications of the administrative code we can counteract the dishonesty and stupidity of officials.²³

²²The surest way to increase the efficiency of criminal justice, is to improve the quality of its personnel. As compared with alterations in the personnel, modifications of the structure and modernization of the equipment of the institutions of criminal justice, and changes in its processes are of slight importance. As Moley has said, *Our criminal courts*, p. xiv. "In those few instances in which it has been tried, perfection of organization has failed to create marked difference in the net result. Good prosecutors and strong judges seem to do well in badly organized courts while . . . inferior persons do badly in the midst of structural perfection."

²³Of course, in order to increase the efficiency of criminal justice we must not only know the causes of inefficiency, but we must also be able to eliminate them. However, knowledge of the causes of inefficiency usually suggests means for their extirpation or, at least, their alleviation. We do not minimize the difficulty in many cases of contriving means for improving the processes and institutions of criminal justice, but we insist that in most cases in which we know the causes of inefficiency, common sense will enable us to contrive such means, provided only that we have the will to do so and know what we want to accomplish. It may be that the first device which we employ will not accomplish our purpose, but with the necessary will to attain our end common sense will usually enable us to contrive other means. Perhaps none of our problems is more difficult of solution than that of improving the personnel of criminal justice, of getting more competent judges, for example. And yet it must be clear that it is not because we lack knowledge but, rather, because we lack single-mindedness of purpose that we have failed to solve that problem. Business men do not usually let political bosses select the business personnel, nor do they themselves select it on a political basis. We do not face such problems with candor and vigor. We temporize with them instead of going to the heart of them. This is in part due to the confusion and complexity of our ends, but it is also in part due to inertia and indifference.

Chapter XI.

THE CRIMINAL LAW

Section 1. The Problems of the Criminal Law.

The criminal law, like any other division of substantive law, consists of the propositions which the state enforces at a given time as rules of law. The propositions of the criminal law do not differ formally in any respect from the propositions of other branches of the substantive law, such as torts, property and contracts. Propositions of law, unlike propositions of science, do not express knowledge; they express practical judgments and decisions. We shall presently distinguish among a number of different ways in which propositions of law can be considered. When they are viewed as descriptive propositions they cease to be propositions of law and become true, false, or probable, as matters of knowledge.

In terms of its content the law of crimes is most closely related to the law of torts. This affiliation is not only discernible in these bodies of law as they now exist, but is also discovered in their common historical roots.¹ Whether or not there is clear rational ground for the distinction between the concept of tort and the concept of crime, between civil and criminal liability, the distinction can be made in fact by reference to clear differences between the operations of the law of torts and of the law of crimes. In the first place, the law of torts regulates controversies between citizens, whereas the criminal law regulates the prosecution of citizens by the state. In the second place, the law of torts provides remedies in the form of compensation, damages and restitution, whereas the criminal law provides for the official treatment of criminals. The behavior content of the criminal

¹For a discussion of the historical development of the criminal law in relation to the law of torts, see Maine, *Ancient Law*, 3rd Am. ed., Ch. X; and Vinogradoff, *Historical Jurisprudence*. For a discussion of the common basis of liability in tort and criminal actions, see Holmes, *The Common Law*, Lectures II, III, IV.

law resembles the behavior content of the law of torts much more closely than the treatment content of the criminal law resembles those provisions of the law of damages, which define the extent of liability for torts. The law of damages determines the consequences of torts just as the treatment content of the criminal law determines the consequences of crimes; but, in the first case, the consequences take the form of judgments for money damages, whereas, in the second case, the consequences take the form of sentences to the various modes of treatment. This difference between the operation of the law of crimes and of the law of torts will be found to be crucial in our later discussion of the purpose of the criminal law and the justifiability of its treatment content.

Just as the body of propositions which define the kinds of behavior which are torts, is separate from, although related to, the body of propositions which determine the consequences of torts, so the propositions which express the behavior content of the criminal law are separate from, although related to, the propositions which state its treatment content. The behavior content of the criminal law is expressed in propositions which define specific crimes. Each of them determines, within a range of ambiguity, the elements of a specific crime. We need not for the present distinguish the acts, states of mind and surrounding circumstances, which may be elements in the definition of a crime. The treatment content is expressed by propositions which determine, again with relative imprecision, the modes of treatment which are the consequences of specific types of criminal guilt.

We must distinguish among three ways in which any proposition of law can be considered.

(1) Propositions of law can be viewed as definitions. In this sense they are declarative.

(2) They can be viewed in the imperative mood as commands or prohibitions accompanied by a political sanction. It should be noted here that from this point of view the behavior content of the criminal law, or of the law of torts, is a set of commands

or prohibitions, while the treatment content of the criminal law and the law of damages are to be considered as stating the sanctions.

(3) They can be viewed as empirical propositions which describe what the courts and other official agencies of the state have done in certain cases.² If these descriptive propositions are converted into generalizations they yield predictions of what will be done in the future to individuals who behave in certain ways. It should be noted that these predictions are always more or less contingent.

It is only as a definition or as a command or prohibition that a proposition has the status of a rule of law. As a description or prediction, it is a proposition of fact which falls within the domain of whatever empirical science comprehends the administration of law. In Chapter IX our knowledge of the administration of the criminal law was surveyed. The validity of the propositions of the criminal law as descriptions of what courts and other officials do in fact, and hence their probability as predictions, was there indicated in the light of knowledge about the administration of the criminal law derived from other sources.³ We shall, therefore, ignore the descriptive interpretation in this chapter which is devoted exclusively to an analysis of the criminal law without any reference to its administration.

The declarative and imperative interpretations of propositions of law are not, as has sometimes been supposed, inconsistent

²With respect to the interpretation of propositions of law as descriptions, common law rules differ from statutory enactments. Common law rules can be viewed as descriptions of past judicial action and can be generalized so as to yield predictions of future judicial action. Statutes are merely predictions until they are interpreted and employed in particular cases.

³The point can be illustrated by reference to the crime of perjury which is one of the crimes defined and prohibited by the behavior content of the criminal law. We cannot merely by a consideration of the rule of law defining and prohibiting perjury ascertain its validity as a proposition describing what the courts have done or its probability as a prediction of what they will do. For these purposes we need empirical knowledge. We need to know how much perjury has been committed, how many perjury prosecutions have been instituted, and in how many convictions they have resulted. This knowledge tells us that, as a descriptive proposition, the proposition has little validity, and as a prediction, a low degree of probability. Convictions for perjury have been rare, although the volume of perjury has been great; it is highly improbable that persons committing perjury in the future will be convicted.

with each other.⁴ As declarative, propositions of law are the elements of legal theory; taken as a set of propositions, they provide an analysis of a body of legal concepts. As imperative, propositions of law are rules; they are regulative in two senses which must be clearly distinguished. In the first sense, they are rules which prescribe the action of officials as officials. In the second sense, they prescribe the conduct of citizens. It is in this sense that they are commands or prohibitions. As a prescription of official action a proposition of law is addressed only to officials; as a command or prohibition a proposition of law is imperatively addressed to all persons, including officials. It should be noted that this distinction is in part the distinction between substantive and procedural law: the propositions of procedural law are imperative in only the first sense as prescriptions of official action, whereas the propositions of substantive law are imperative in both of the senses indicated. The propositions expressing the treatment content of the criminal law and the law of damages are to be construed as imperatively addressed only to officials. As prescriptions of official action they constitute the sanctions necessary to enforce the commands and prohibitions of the behavior content.⁵

The problems of the criminal law are the same whether the propositions of the criminal law be construed as declarative or imperative, and theoretical problems can be distinguished here, as elsewhere, from practical problems. This distinction serves also to differentiate the study from the practice of the criminal law. The jurist, as a student, is concerned exclusively with theoretical

⁴It is the essential defect in Austin's analysis of the nature of law, that he fails to recognize that any proposition of law is convertible from the imperative into the declarative mood, and conversely. Austin is correct to the extent that he identifies rules of law with imperative propositions, rules are prescriptions. But propositions of law must be considered in relation to one another. Thus considered, they are not rules but declarations,—definitions and determinations which are related according to the generality of the concepts which they define and determine. As a command or prohibition, a proposition of law can and must be considered in isolation from other propositions, although, of course, in order to know its meaning, as a rule to be applied to a specific case, it may be necessary first to consider it as declarative and, therefore, in relation to other propositions.

⁵It should be noted here that the interpretation of the propositions expressing the treatment content of the criminal law as sanctions, presupposes an answer to the question what is the ultimate end of the criminal law. The notion of a sanction entails the idea of the deterrent purpose of treatment. This, as we shall see, is inconsistent with the purpose of treatment as punitive retribution.

problems; the lawyer, the judge, the legislator and other officials, as practitioners, are concerned exclusively with practical problems.⁶

The theoretical problems of the criminal law are in part problems in jurisprudence which are common to all divisions of law. These problems can be divided into two groups. The first consists of questions which occur in that branch of jurisprudence which falls within the domains of ethics and politics: such questions as what *should* be the ultimate end of criminal law, what behavior *should* be made criminal, what treatment *should* be accorded criminals. These questions require an analysis of the foundations of law. Laws are political instruments. The question what end they should serve is, therefore, a question in the rational science of politics. To ask what behavior should be made criminal and how criminals should be treated is to inquire into the justifiability of the provisions of the criminal law. These questions can be answered only by a definition of justice to be found in the rational science of ethics.

The second group consists of questions which can be answered by a study of the criminal law without reference to ethics and politics: such questions as what have been or what are the purposes which the criminal law has served or does serve, what behavior has been made criminal at different times and places and what behavior is now made criminal by the laws of a given state, what treatment has been applied to criminals at different times and places and what treatment is now applied to them. These questions can be answered only by an historical and a comparative study of criminal law and by knowledge of the criminal law as it exists today. This knowledge, as we shall see, may be merely information about the content of the criminal law or, if properly developed, may take the form of a rational science of criminal law.

The practical problems of the criminal law are different for different kinds of practitioners. We shall consider here only the

⁶It must be understood that the same individual can, of course, be both a student and a practitioner. Judges and legislators are often jurists as well.

problems of the legislator and of the judge. These practical problems are parallel to the theoretical problems; they differ in that they ask what *shall* be done instead of what *should* be done or what *is* or *has been* done.

The legislator must decide what behavior shall be made criminal and how criminals shall be treated. Were he a perfectly rational legislator, his answers to these questions would be dictated by his answers to the theoretical questions what behavior should be made criminal and how should criminals be treated. The practical problems of the judge differ from the practical problems of the legislator only because he is an administrative officer who must decide, not what kinds of behavior shall be made criminal or how criminals shall be treated, but whether particular persons have in fact behaved in ways which are prohibited, and, if so, to what modes of treatment they shall be subjected. The judge, however, is never exclusively an administrator. He performs a legislative function to the extent that his rulings upon questions of law can be formulated in propositions which more sharply define criminal behavior. Some theory of the criminal law must dictate both his decision of particular cases and his judicial legislation. To the extent that he is left with freedom of decision, he will, if he is a rational judge, answer the question whether particular behavior shall be made criminal only after he has determined what behavior, in general, should be made criminal.

We shall proceed in this chapter, first, to consider the theoretical problems which we have indicated and, then, to formulate the conditions of a rational solution of the practical problems of the judge and the legislator. The basic question is what end *should* the criminal law serve. The answer to this question determines in part the answer to the questions what behavior should be made criminal and how criminals should be treated, as well as the solution of the practical problems of the judge and of the legislator.

Section 2. What Should be the Ultimate End of Criminal Law.

Two answers have been given to this question. The first, in point of time, is that the purpose of the criminal law is to preserve and increase the welfare of the state, which has been variously called the common good or the political good. The other is that the criminal law should serve the end of meting out punishment as retribution for crime.⁷

The inconsistency of these two theories can be indicated as follows: according to the first, the provisions of the criminal law are justifiable only to the degree that they serve the common good and punishment as a mode of treatment can be justified only in this way; according to the second theory, the provisions of the criminal law are justifiable to the extent that they apportion degrees of punishment as measures of retribution for offenses of different degrees of gravity, and punishment is the *only* mode of treatment which can be justified at all. The inconsistency can be emphasized by two dilemmas which formulate the opposition between the theories. (1) *Either* punishment is justified as retribution *or* it is justified as a means to the common good by way of deterrence and reformation. (2) *Either* punishment is the only mode of treatment which is justifiable *or* any mode of treatment, whether it be punitive or not, is justifiable.

⁷It must be understood that we are not here discussing what are or what have been in fact the ends of the criminal law, but rather, what should be the end of the criminal law, which is a question of theory and not of fact. As a matter of fact, the criminal law was probably in origin an instrument of vengeance by which the state satisfied and socialized the vindictive reactions of its citizens (see Maine's discussion of this point, *op. cit.*, Ch X), but no theory of the criminal law has ever maintained that it should be an instrument of vengeance. The end of retributive justice by meting out punishment for offenses must not be confused with the vindictive sentiments which may in fact exist at any time in a society and find satisfaction in the operations of the criminal law. This confusion is, in part, responsible for the designation of the theory of the criminal law as serving the end of punitive retribution, as the classical theory. If by classical is meant either (1) a position grounded in the writings of Plato and Aristotle or (2) the earliest and most ancient understanding of the criminal law, it is a misnomer to call this theory classical. Its first explicit statement occurs at the end of the eighteenth century. On the other hand, the conception of the criminal law as serving the common good can properly be called the classical theory. As F H Bradley points out (*Ethical Studies*, 2nd ed., Essay I), the punitive theory, formulated in the eighteenth century, is a philosophical statement of the vulgar or popular notions of responsibility and punishment, which are probably extremely old.

This issue must be resolved. It can be resolved by showing which of the two theories is the correct analysis of the ethical and political considerations in the light of which the purpose of the criminal law must be determined and its provisions justified. It can thus be shown that the punitive theory is a fallacious analysis and that the non punitive theory is correct.⁸

It is necessary to state the grounds upon which the resolution of this issue is achieved. Ethics and politics are the subject matters of rational sciences. Questions about the final end of law and about the nature of justice can, therefore, be answered correctly or incorrectly. They are not, as is currently supposed in certain quarters, matters of opinion.⁹ Much contemporary discussion of the criminal law is satisfied to report these two opposing doctrines as if their opposition represented an ultimate difference of opinion which offered only a prejudicial and not a rational choice. We are not approaching the issue in this way. While there are a number of different ethical doctrines which can be distinguished in terms of authorship, historical locus, and tenets, they all have a common subject matter of which they are

serving the end of punitive retribution 'the p
ception the 'non-punitive theory', although th
tions of the differences between these two doctrines

⁸In his *Essay Concerning Human Understanding* Locke distinguishes between the physical sciences, in which man can have probable knowledge, and the moral sciences and mathematics, in which man has certain knowledge. In Chapter 3 of Book IV he writes "The idea of ourselves, as understanding, rational beings, being such as is clear in us, would, I suppose, if duly considered and pursued, afford such foundations of our duty and rules of action as might place *moralty amongst the sciences capable of demonstration* wherein I doubt not but from self-evident propositions, by necessary consequences, as incontestable as those in mathematics, the measures of right and wrong might be made out, to anyone that will apply himself with the same indifference and attention to the one as he does to the other of these sciences . . . 'Where there is no property, there is no injustice', is a proposition as certain as any demonstration in Euclid for the idea of property being a right to anything, and the idea to which the name injustice is given being the invasion or violation of that right, it is evident that these ideas, being thus established, and these names annexed to them, I can as certainly know this proposition to be true, as that a triangle has three angles equal to two right ones. Again, 'No government allows absolute liberty' The idea of government being the establishment of society upon certain rules or laws which require conformity to them, and the idea of absolute liberty being for anyone to do whatever he pleases I am capable of being as certain of the truth of this proposition as of any in mathematics."

Locke makes clear that moral science is knowledge of the relation between ideas, whereas physical science is knowledge of matters of fact. This accounts for the certainty of the former and the contingency of the latter

attempting to present an analysis. If the field of ethics were not their common subject matter, they could not be recognized as different ethical doctrines. Furthermore, their differences are of two sorts. As geometries differ with respect to the postulated conditions of spatial construction, so these ethical doctrines differ in terminology and in postulates. Like geometries, they are capable of being translated by the application of transformation formulae.¹⁰ Thus, their plurality is reduced. But these doctrinal differences may also represent errors or inadequacies in analysis, which can be detected and criticised in ethics as in mathematics. Approaching the issue between the two theories of the criminal law in this way, we can resolve it beyond further dispute by reasonable men. To deny that errors in ethical analysis can be detected or to maintain that controversies in ethics are merely expressions of differences of opinion which are unsusceptible to rational criticism, is to be essentially unreasonable. If there is any one who holds this position, it is clear that he cannot be appealed to upon rational grounds.

We shall first present the non-punitive theory of the criminal law. In the light of this doctrine, we shall be able to indicate the errors of analysis in the opposing theory. When these errors are corrected the latter position is entirely transformed. It becomes identical with the non-punitive theory. There is, thus, only one correct ethical analysis of the criminal law.

In the first place, the criminal law like any other body of law having a political sanction, is an instrument of the state. It is designed and administered for the sake of the welfare of a political society, however much in fact it may serve contrary purposes. This conception of the function of law in general, and of the criminal law in particular, is common to such diverse thinkers as Aristotle and Thomas Aquinas, on the one hand, and Bentham

¹⁰Thus, John Stuart Mill in the opening chapters of his *Utilitarianism* translates the conclusions of other ethical doctrines into his own. It is an excellent illustration of the technique of doctrinal transformation. Unfortunately, Mill fails to appreciate that one of the effects of this translation is to reveal the utter lack of originality in utilitarianism and the absence of genuine issues between himself and those whom he thought to be his opponents.

and Von Jhering, on the other.¹¹ It must be understood that societies are differently constituted and that according to the differences in their constitutions, their welfare or good may depend upon different conditions. These differences are, however, not relevant to the point here being made. However the social good be defined in a given society, the laws created and enforced in that society must be intended to realize that aim.¹²

It is in the light of this conception of the purpose of law that the justice of laws, or legal justice, is defined. Laws are just or right if they serve the common good; they are unjust if they are contrary to it. Whereas justice is an absolute, no law can be more than an inadequate determination of justice and in this sense can be only relatively justifiable or unjustifiable.¹³ The idea of justice as conformity to the social good is thus a standard by which particular laws can be more or less justified. We are not here concerned with the degree of justifiability of any law, but merely with the conception of justice which underlies the justification of all laws. The critical point is that a just law is not an end in itself, but that it is a means, one among many, to achieve

¹¹Thus Aristotle "The laws in their enactments mon advantage either of all or of the best, or of thos. of the sort, so that in one sense, we call those acts just that tend to produce and preserve happiness and its components for the political society" *Ethics*, V, 1.

Similarly Aquinas "Laws are enacted for no private profit, but for the common benefit of the citizens Every law is ordained to the common good." *Summa Theologica*, Ia IIae, Q. 90, Art. 2

And Bentham "The public good ought to be the objective of the legislator; general utility ought to be the foundation of his reasonings To know the true good of the community is what constitutes the science of legislation, the art consists in finding the means to realize that good" *Principles of Legislation*, Ch. 1

¹²This statement must not be interpreted to mean that every law enacted in a given society does in fact express this intention. As we shall see, the distinction justifiable and unjustifiable legislation is in terms of the standard here indi-

must be recognized that we can know what truth is without knowing whether a proposition presented to us is true; and we can know what probability is without knowing whether a given proposition is probable or what degree of probability it has Similarly, we can know the nature of justice without being able to know whether a given law is just, we can know what are the conditions of the justifiability of any law without knowing to what degree a given law is justifiable.

Thus, Plato says in *The Republic*, Book V: "We are inquiring into the nature of absolute justice and into the character of the perfectly just, and into injustice and the perfectly unjust, that we might have an ideal We were to look at these in order that we might judge of our own happiness and unhappiness according to the standard which they exhibited and the degree in which we resembled them, but not with any view of showing that they could exist in fact."

the ultimate political end of the state's welfare. Justice, whether it be a virtue in human character or a virtue in a law, is like any other virtue, a means and not an ultimate end.

We can now turn to the answer which this theory of justice gives to the question of the justifiability of punishment. The justifiability of the propositions expressing the treatment content of the criminal law is determined by reference to the standard of justice which has been indicated. Treatment which consists in the infliction of pain upon the criminal is justified to whatever extent such treatment achieves the ends of deterrence and reformation which, in turn, are means for the protection of society against conduct which it deems contrary to its interests. The infliction of pain is never justified merely on the ground that it visits retributive punishment upon the offender. Punitive retribution is not justifiable in itself, and if the infliction of pain is viewed as a means to deterrence or reformation and is thus justified, it *ceases* to be punitive retribution. In short, there are only two justifications of punishment which can be advanced,¹⁴ and of these, retribution can be shown to be untenable as a justification of punishment.

Aristotle's discussion of retaliation, while it is not entirely clear, distinguishes between commutative and distributive justice, which are proportional, and retaliation which is not.¹⁵ Thomas Aquinas justifies punitive treatment only as a deterrent or as a reformatory. Through fear of punishment the commands and prohibitions of the law are effective and "law, even by punishing,

¹⁴Edward Jenks, in his *Book of English Law*, p. 191, enumerates a number of different views of the object of punishment which have been held during the historical development of the English criminal law. These reduce either to vengeance, which cannot be justified at all, or to retribution, or to the utilitarian grounds of deterrence and reformation.

¹⁵This is to be found in *Ethics*, V, 5. What is vague in the analysis is probably due to the fact that Aristotle is considering Greek law in which there is no sharp distinction between criminal and civil liability. Thus Vinogradoff, *op. cit.*, pp. 69-70, points out that Aristotle *denies* the Pythagorean conception that the root of justice is in retribution. According to Vinogradoff's interpretation, retaliation or retribution cannot be applied in criminal justice, although what is analogous to it, namely, the proportions of commutative and distributive justice, is applied by the civil law. In other words, the notion of retribution is proper only as a measure of exchange between parties to civil suits and not as a measure of punishment in the treatment of the criminally guilty.

leads men on to be good."¹⁶ Capital punishment, for instance, is justified only "in so far as it is directed to the welfare of the whole community."¹⁷ Aquinas expresses the position of the medieval Catholic Church which, as Munroe Smith has pointed out, conceived penalties under two heads, those inflicting punishment required for the maintenance of the social order, and those which were recognized as healing penalties (*poenae medicinales*) for the purpose of reforming the criminal.¹⁸ Here, clearly, the justification of punishment, as part of the treatment content of criminal law, is by reference to the intermediate ends of deterrence and reformation and the ultimate end of the social good.

The position held by Aristotle, Aquinas and the medieval Catholic Church in respect to the justification of punishment is the same as that advanced in the nineteenth century by the English utilitarians and the continental positivists.¹⁹ The analysis of law made by Austin and Bentham is an incomplete modern statement of the Aristotelian and Thomistic analysis. As we have seen, Bentham conceives the end of law to be the welfare of the state and his discussion of the utility of laws (as means to this end) is formally identical with Aristotle's discussion of the justifiability of laws (as means to the same end). Justice and utility are merely different names for the same virtue. It must follow, therefore, according to Bentham, as with Aristotle and Aquinas, that "punishments are so many evils which are not justifiable except so far as results from them a greater sum of good."²⁰ Bentham offers a detailed analysis of the factors in

¹⁶*Op cit*, Ia IIae, Q 92, Art 2 In this, Aquinas follows Plato's discussion in the *Gorgias* of punishment as a reformative

¹⁷*Op cit*, Ia IIae, Q 64, Art 3

¹⁸*The Development of European Law*, pp 209-210

¹⁹The identity of the classical conception of justice in Plato and Aristotle and the modern conception of justice by English utilitarians is nicely indicated by Cicero in *De Legibus*, Book 1, Section 12. "For those creatures who have received the gift of reason from nature have also received right reason, and therefore they have also received the gift of law which is right reason applied to command and prohibition; and if they have received law, they have received justice also. Now, all men have received reason, therefore, all men have received justice. Consequently Socrates was right when he cursed, as he often did, the man who first separated utility from justice, for this separation, he complained, is the source of all mischief."

²⁰*Principles of Legislation*, p 60. See also J S Mill's discussion of punishment in his *Examination of the Philosophy of Sir William Hamilton*.

terms of which punishment is justified or unjustified. Throughout this long list, the justification is always the same, namely, that punishments protect society by preventing criminal behavior.²¹

The Italian and French positivists agree in general with the English utilitarians with respect to the justification of punishment. They are chiefly concerned, however, with recommending changes in the criminal law to increase its reformatory influences, by the introduction of various non-punitive methods of treatment devised for different types of offenders. Their analysis is inadequate, in so far as they ignore or underemphasize the problem of deterrence. Punitive treatment which may not be justified as a reformatory may be justified as a deterrent. The choice between reformation and deterrence must be with respect to their value as means to the social good.

We can now emphasize the three points which differentiate this theory of the criminal law from the punitive theory which we are about to state:

(1) Justice is not a final end but a means to the social good; laws are justifiable to the extent that they serve as means to this end.

(2) By this standard of justice the justifiability of any of the provisions of the behavior or treatment content of the criminal law must be determined. Behavior should be made criminal by reference to its social consequences. Treatment should be devised with deterrence and reformation as its aims; it may, but need not, consist in the infliction of pain.

(3) The determination of the social good differs according to the constitutions of different political societies. What is justifiable in the behavior content of a body of criminal law will be different according to the nature of the society in which it is made and enforced.

²¹Thus, for example, Bentham shows that punitive treatment can be justified on the grounds that it satisfies the vindictive sentiments of the populace and therefore prevents crimes which might otherwise be committed as acts of vengeance. Bentham, it should be added, is primarily interested in the deterrent effects of punishment.

The conception of the criminal law as an instrument of retributive justice²² is based upon the ethical doctrines of Kant and Hegel²³ and is developed in their theories of right. Kant's ethical doctrine has much in common with the conceptions of the Roman stoics and, as we shall see, it contains the stoical error of treating virtue as a final end. But Cicero²⁴ and other Roman writers on law who were also influenced by stoic philosophy never developed a conception of the criminal law as a purely punitive device in the service of retributive justice.

Although the Kantian and Hegelian positions are differently argued, their major conclusions are the same.²⁵ Kant holds that "judicial punishment can never be administered merely as a means for promoting a good society, but must in all cases be imposed only because the individual on whom it is inflicted *has committed a crime*." For "one man ought never to be dealt with merely as a means subservient to the purpose of another. . . .

²²For a discussion of Stammler and Kohler, followers of Kant and Hegel, see Hocking's *Law and Rights*, Ch. IV. Stammler and Kohler agree in the notion that punishment is just as retribution (p. 43 *et seq*).

²³This conception must not be confused with *lex talionis* of the ancient Hebraic code. Kant interprets *lex talionis* in the conventional restricted sense as a measure of punitive retribution, that is, "an eye for an eye, a tooth for a tooth, a life for a life." The significance of the position of Kant and Hegel is their attempt to justify *lex talionis* in this sense. This was never attempted in Greek legal theory, Roman jurisprudence, or in the philosophy of law expounded by the fathers of the Catholic Church. It may be historically significant that Kant was both a Protestant and a Pietist and, whether explicitly or not, was influenced by the Calvinistic revival of the legalistic spirit of the Old Testament.

It should be pointed out that the conventional interpretation of *lex talionis* considers only *Exodus*, XXI, 23-25. But if this passage is read in the context of Chapters XX, XXI and XXII in their entirety, it will be seen that the Mosaic Code is more generally based upon a principle of material restitution which is like the Greek idea of commutative justice, that is, in the case of most crimes, the criminal is required to restore the property or pay damages, and no mention is made of punishment. For an interpretation of *Exodus* in the light of Aristotle, see Aquinas, *op. cit.*, IIa IIae, Q. 61, Art. 4.

²⁴For Cicero's conception of justice as a means to the good of the state (*salutaris rei publicae*), see *De Re Publica*, Book 3, pp. 32-41.

²⁵The punitive theory is both the vulgar notion, as Bradley points out, and also the doctrine developed by the two great German philosophers, Kant and Hegel. "If there is any opinion to which the man of uncultivated morals is attached, it is the belief in the necessary connexion of punishment and guilt. Punishment is punishment, only where it is deserved. We pay the penalty, because we owe it, and for no other reason; and if punishment is inflicted for any other reason whatever than because it is merited by wrong, it is a gross immorality, a crying injustice, an abominable crime, and not what it pretends to be." (*Ethical Studies*, p. 26) Punishment is an end in itself. Kant and Hegel attempted to rationalize the popular or vulgar view that punishment is intrinsically just.

The penal law is a categorical imperative; and woe to him who creeps through the serpentine windings of utilitarianism to discover some consideration which, by its promise of advantage, should free the criminal from the penalty, or even from any degree thereof. . . . Justice would cease to be justice, if it were bartered away for any consideration whatever".²⁶ Similarly, Hegel points out that punishment is absolutely just. He argues against the conception of punishment as preventive, deterrent or reformatory, as superficial. Punishment must not be considered as a good in the sense of being a means to some other end. His position briefly is that wrong being the negation of right, punishment is a negation of that negation, or just retribution. Retribution, he says, "is the inner connection and identity of two things which in outward appearance and in external reality are different."²⁷ It is thus that the essential equality of crime and punishment is supposedly established. This equality constitutes retributive justice, of which punishment is an indispensable element.

The Kantian and Hegelian positions can be summarized as follows:

- (1) The end of the criminal law is punitive retribution.
- (2) Punitive retribution is essentially just and the justice of punitive retribution is absolute, that is, it is not relative in any way to the constitution of any given society.
- (3) Justice is an ultimate end. It is to be sought for its own sake and without regard to the social good.

²⁶The *Science of Right*, Part 2, Sect. 49. E. Kant furthermore transforms *lex talionis* into *jus talionis*. "The right of retaliation," he says, "is the only principle which in regulating a popular court, as distinguished from merely private judgment, can definitely assign both the quality and quantity of a just penalty." The *jus talionis* is absolute. It is an end in itself and it is a moral duty to achieve it always. Thus, Kant says. " . . . even if a civil society resolved to dissolve itself with the consent of all of its members, as might be supposed in the case of a people inhabiting an island resolving to separate and scatter themselves throughout the whole world, the last murderer lying in the prison ought to be executed before the resolution was carried out. This ought to be done in order that every one may realize the desert of his deeds and that blood-guiltiness may not remain upon the people; for otherwise they might all be regarded as participators in the murder as a public violation of justice."

²⁷See his *Philosophy of Right*, sections 97-104.

(4) Only behavior which is morally wrong should be made criminal, and punishment is the only proper mode of treatment.

The errors in this analysis can be simply pointed out.²⁸ In the first place, Kant and Hegel fail to recognize that laws are political instruments and serve a political end. If political expediency should require laws which would fail to do retributive justice, they would hold expedient legislation to be immoral. This is a false separation of the fields of legislation and morality.²⁹ In the second place, the conception of justice as an end in itself is a failure to recognize that all virtues are means to happiness as the ultimate good. While, as Aristotle points out in the *Ethics* (I, 7), virtues may be sought for their own sake, they are also sought for the sake of happiness, whereas happiness is sought only for itself, happiness, not virtue, is the final good. In the third place, the conception of retaliation as retributive justice is based upon a false analogy with the commutative or corrective justice of the civil law. Finally, the conception of the criminal law as the instrument of retributive justice cannot comprehend the distinction between crimes which are *mala prohibita* and

²⁸The fallacies in the Kantian position due to the association of retributive justice with responsibility and free will are discussed in the next section. See p. 359, fn. 46, *infra*.

²⁹Kant's erroneous separation of the moral and political grounds of punishment is best illustrated in the following statement: "Punishment in general is physical evil accruing from moral evil. It is either deterrent or else retributive. Punishments are deterrent if their sole purpose is to prevent evil from arising, they are retributive when they are imposed because an evil has been done. Punishments are, therefore, a means of preventing an evil or of punishing it. Those imposed by governments are always deterrent. They are meant to deter the sinner himself, or to deter others by making an example of him. But the punishment imposed by a being who is guided by moral standards, are retributive. Punishments appertain either to the lawgiver's justice or to his prudence—in the first case they are moral, in the second case they are practical. . . . All punishments imposed by sovereigns and governments are practical; they are designed either to correct or to make an example. Ruling authorities do not punish because a crime has been committed, but in order that crime should not be committed. But apart from this actual punishment, every transgression has a penal desert for the reason that it has been committed. Punishment which must follow from the action by such a necessity, is moral and therefore a *poena vindicativa*." Lectures on ethics, New York: The Century Co., 1930, pp. 55-56. See the discussion of this point in the Preface, *supra*. The reader who is interested in the point should read all of Kant's essay from which we quote.

For another aspect of Kant's separation of the moral and political, see Stammeler's discussion of the relation of justice to the common good in *The theory of justice*, New York: The Macmillan Co., 1925, p. 151ff.

crimes which are *mala in se*. These last two points require some elaboration.

Commutative or remedial justice determines the consequences of civil liability. Commutative justice was first formulated by Aristotle as the arithmetical proportion or equality which must obtain between the damage done to, or injury suffered by, the plaintiff and the compensation or relief given to the plaintiff. Commutative justice thus consists in the compensations and other remedies which the civil law affords injured or aggrieved parties. It always provides, in some manner, a material restitution to the injured party. Civil justice is commutative in the sense that it operates to equalize the inequalities which the plaintiff charges the defendant with having produced. If retribution means nothing more than a material remedy which is proportional to an injury suffered, then the civil law can properly be called an instrument of retributive justice.⁸⁰

But the criminal law can never be viewed as an instrument of retributive justice in this sense. The criminal law is not remedial or commutative. The supposition that the equation of crime and punishment, the proportion between the gravity of the offense and the severity of the punishment, is retributive justice, is the result of a confusion of retribution in the sense of retaliation with the idea of remedial or commutative justice. To think of criminal justice as retributive one must think of punishment as a recompense to the state for the injury which it has suffered at the hands of the criminal. This is clearly a false analogy. The punishment of an offender is not a recompense to the state, nor as a matter of fact is it a recompense to any citizen who may have suffered injury at the hands of the criminal. Punishment, therefore, cannot be justified as an act of retribution in the sense in which the payment of damages is justified as a civil remedy. In short, either retributive justice means the

⁸⁰The formula of remedial justice is often stated in the following terms: justice is giving every man his due. According to the punitive theory, punishment can be just only if it is held that it is due a ~~particular person~~ *particular person*. But this is an abuse of the formula of commutative justice, a satisfaction to an injured person.

same as commutative justice, in which case it applies in civil but not in criminal actions, or retribution means retaliation and the phrase "retributive justice" is self-contradictory since retaliation cannot be justified.⁸¹

The other point to be elaborated has to do with the distinction between *mala prohibita* and *mala in se*.⁸² The Kantian and Hegelian point of view denies that justice is relative to the nature of a political society or that the law is justifiable only as an instrument for achieving the social good, which is differently determined in different societies. It is, therefore, impossible from this point of view to justify the punishment of acts which are not qualified by moral turpitude. But as Holmes points out, a *malum prohibitum* is just as much a crime as a *malum in se*. If there is any general ground for punishment, it must apply in one case as well as in the other.⁸³ But this is impossible, according to the punitive theory, since only *moral* wrongs merit punishment as *moral* retribution. The view of the criminal law as the instrument of retributive justice is incapable of comprehending *mala prohibita* as crimes. Since such wrongs are wrongs only because prohibited, there can be no justice in the punishment of the doers of such wrongs except on the theory that these acts are prohibited because they are deemed to be contrary to the interests of the state. But this is to justify punishment on the ground of the social interests to be protected. Punishment is no longer just in itself.

We can, therefore, conclude with Holmes that "there can be no case in which the lawmaker makes certain conduct criminal without his thereby showing a wish and purpose to prevent that

⁸¹It is interesting to note that in early Roman law criminal actions were indistinguishable from civil actions in the sense that monetary compensation was the chief remedy for injuries suffered (see Maine, *op. cit.*, pp. 358-359). It should also be noted that proposals have been made recently for the extension of civil remedies to criminal actions in this country. As Holmes points out, there can be no justification for punishment as retribution if the criminal has made restitution to the party who has suffered because of his crime.

⁸²We shall return to a fuller discussion of this distinction. It is sufficient here to point out that *mala prohibita* are crimes which differ according to the constitutions of different societies. What is a *malum prohibitum* in one society, may not be so in another.

⁸³*Op. cit.*, p. 46.

conduct. Prevention would accordingly seem to be the first and only purpose of punishment."³⁴ The correct analysis of the end of the criminal law and of the justifiability of its behavior and treatment content is that first given in the ethical and political writings of Aristotle and Thomas Aquinas, and repeated in the works of modern utilitarians and positivists. Punishment cannot be justified as retributive, nor can retribution properly be the ultimate end of the criminal law. The end of the criminal law must be the common good, the welfare of a political society determined, of course, by reference to its constitution. Punishment can be justified only as an intermediate means to the ends of deterrence and reformation which, in turn, are means for increasing and preserving the welfare of society; the infliction of pain may be only one of many kinds of treatment which serve this purpose.

Section 3. What Behavior Should be Made Criminal.

The behavior content of the criminal law is expressed in all those propositions which define specific crimes in terms of their constituent elements. These definitive propositions can also be read as evaluations. Human behavior is always an element of crime and these propositions can be interpreted as evaluating certain types of human behavior as criminal.

The question what behavior should be made criminal is a question as to the justifiability of the definitions of particular crimes which comprise the behavior content of any body of criminal law. The answer to this question depends upon two factors: (1) the definition of crime and (2) the ultimate end which the criminal law should serve. These two factors are not independent, since the definition of crime is itself determined by the end of the criminal law. The definition of crime is insufficient to decide the question what behavior should be made criminal.

³⁴ Holmes makes an excellent
 • Kantian and Hegelian argu-
 mentable arguments are clearly indic-
 ated, see
 Wollstonehouse *Social Justice* &
 responsibility

The proper end of the criminal law being the welfare of the state, only behavior which is detrimental to that welfare should be made criminal. This statement must be understood negatively to mean that no behavior which is not detrimental to the social good should be made criminal. It does not follow that all behavior which is socially deleterious should be made criminal. The definition of crime as behavior which is contrary to the social good is, therefore, insufficient to determine what behavior should be made criminal. Laws which make certain types of behavior criminal may be more undesirable in their social consequences than the behavior itself. In many cases it may be impossible to determine the balance of advantage and disadvantage, but in every case the conception of the criminal law as an instrumentality for achieving the social good requires a consideration not only of the consequences of particular behavior, but also of consequences of the laws which must be employed to combat them.⁸⁵ For the sake of clarity, let us separate these two factors which enter into the determination of the behavior content of the criminal law. Let us consider, first, the kinds of behavior which it is proper to make criminal, and then turn to the disadvantages which may attend making certain types of behavior criminal.

The most important distinction to be made is between behavior which is undesirable in any political society and behavior which is undesirable only by reference to the special constitution of a particular society. This is the Aristotelian distinction between acts which are naturally unjust and acts which are unjust only because the enactments of a given state prohibit them.⁸⁶ By acts naturally unjust is meant behavior which is contrary to the welfare of *any political society*; by acts legally or conventionally un-

⁸⁵Bentham's discussion of the principles of a penal code in his *Theory of Legislation* gives the most detailed exposition of this comparison of advantages of behavior proposed as criminal and the disadvantages which such behavior makes.

⁸⁶*Ethics*, V, 7. Thus he writes "Of political justice part is natural, part legal; natural, that which everywhere has the same force and does not exist by people's thinking this or that, legal, that which is originally indifferent, but when it has been laid down is not indifferent. . . . The things which are just not by nature but by human enactment are not everywhere the same, since constitutions also are not the same, though there is but one which is everywhere by nature best."

just is meant behavior which is determined to be undesirable by reference to the constitution of a *particular political society*. Since states differ in their constitutions and since their constitutions determine their welfare differently, behavior which is contrary to the welfare of one state may not be so considered in another state. It should be noted, furthermore, that although certain types of behavior are universally undesirable, the precise determination of what constitutes such behavior can differ from society to society. All laws are conventional, and in this sense are inadequate expressions of justice. Murder should be prohibited irrespective of the constitution of a particular society, but the determination of what kinds of homicide constitute murder is always arbitrary to some degree and a matter of convention.⁸⁷

⁸⁷A clear discussion of the relation between the general formulae of right and justice and particular determinations which are made in positive laws is to be found in Whewell's *Elements of Morality* (Book 1, Ch. 5). "It has been stated that moral rules must be expressed by reference to men's rights; and thus they necessarily depend upon rights actually existing. Further, it has been stated that men's actual rights are determined by positive law, men's rights in each community are determined by the positive law of that community. But the laws of different communities are different; and the determination of men's rights by various states are various. Personal security, property, contract, marriage, are regulated by very different rules in one state, and in another. Private war, slavery, polygamy, concubinage, have been permitted by the laws of some states; and many other practices which are forbidden by our laws. And it seems to follow from this, that morality which depends on the laws, must prescribe different rules, in the states in which such practices are permitted, and in those in which they are forbidden.

"But on the other hand, we have shown that moral rules exist necessarily; that they are necessary to the action of man as man; and that they result necessarily from the possession of reason. From this it seems to follow, that moral rules must be necessary truths, flowing from the moral nature of man; and that therefore, like other necessary truths, they must be unalterable, and accordingly, moralists have constantly spoken of immutable, universal truths.

"How are these two opposite doctrines to be reconciled?

"They are thus reconciled. The *conceptions* of the fundamental rights of man are universal, and follow necessarily from the moral nature of man: the *definitions* of these rights are diverse and are determined by the laws of each state. The conceptions of personal safety, security, property, contract, family, exist everywhere; and man cannot be conceived to exist as a moral being, in a social condition, without them. The rules by which personal safety, security, property, contract, families, are maintained and protected, are different in different communities, and will differ according to the needs and purposes of each community. The rules of morality are universal and immutable so far as they are expressed in terms of these conceptions in their general form: it is always our duty to respect the personal safety, the property, the contracts, the family ties, of others. But if we go into those details of law by which these conceptions are in different communities differently defined, the rules of morality may differ. In one country the wayfarer may morally pluck

The Aristotelian distinction is unfortunately distorted in the distinction between *mala in se* and *mala prohibita* and in the further extension of that distinction to differentiate felonies and misdemeanors. The connotation of the phrase *mala in se* involves more than the Aristotelian conception of acts which are wrong naturally. *Mala in se* are thought to be acts which are wrong in themselves, wrong intrinsically, in the sense that they are qualified by moral turpitude, whereas *mala prohibita* are supposed to be wrong only because of legal prohibition.³⁸ This misses the excellent point in the Aristotelian distinction, which is the introduction of constitutional differences between states as the basis for their different prohibitions and the recognition of the common structure of all political societies as the basis for their common prohibitions;³⁹ furthermore, it ignores the Aristotelian point that all crimes are acts legally determined to be criminal and hence are arbitrarily or conventionally defined.⁴⁰

the fruits of the earth as he passes, and in another he may not, because when so plucked, in one place they are, and in another they are not, the property of him on whose field they grew. The precept, *Do not steal*, is universal, the law, *To pluck is to steal*, is partial."

One might disagree with some of the examples which Whewell gives and yet be forced to accept his analysis. Whewell's analysis follows Grotius's distinction between the natural and the conventional. (See *De Jure Belli et Pacis*, translated by Whewell. Cambridge: The University Press, 1853. At I, i, 10, 1.) Grotius in turn, under the influence of Aquinas, follows Aristotle on this point.

³⁸Blackstone formulates the tradition of the common law with respect to this distinction in the Introduction to the *Commentaries*. Blackstone's distinction between *mala in se* and *mala prohibita* involve common law crimes and crimes prohibited by statute.

³⁹Acts qualified by moral turpitude are not necessarily crimes, but only if qualified by moral turpitude. Aquinas makes this

clear.

In answer to the question whether it belongs to human law to repress all vices Aquinas says that human law rightly allows some vices, by not repressing them. "Human law is framed for a number of human beings, the majority of whom are not perfect in virtue, wherefore human laws do not forbid all vices, from which the virtuous abstain, but only the more grievous vices, from which it is possible for the majority to abstain, and chiefly those that are to the hurt of others, without the prohibiting of which human society could not be maintained: thus human law prohibits murder, theft, and suchlike." (*Op cit.*, Ia IIae, Q 96, Art. 2)

Similarly Aquinas points out that law does not prescribe all virtues. Thus, he writes "Law, as stated above, is ordained to the common good. Wherefore there is no virtue whose acts cannot be prescribed by the law. Nevertheless, human law does not prescribe concerning all the acts of every virtue, but only in regard to those that are ordainable to the common good." (*Op cit.*, Ia IIae, Q 96, Art. 3)

⁴⁰See in this connection Makarewicz, *Einführung in die Philosophie des Strafrechts*, pp. 136-213. The point is nicely illustrated by the changes which were made in the

In other words, every act which is made criminal, whether by common law or by statute, whether a felony or a misdemeanor, should be an act which is determined to be socially undesirable either by reference to the nature of *any* political society or to the constitution of a *particular* society. In some cases this determination can be made without a study of the social consequences of behavior. This is usually true of behavior which is undesirable in all political societies. Our common experience and knowledge may instruct us that such behavior should be prohibited for the sake of the welfare of the state. Our common experience and knowledge may not, however, suffice to define the acts to be prohibited with the necessary precision. In other cases, it may be necessary to undertake empirical investigations of the consequences of certain types of behavior, in order to determine whether they are socially undesirable and in order to define the acts which should be made criminal. In every case it is necessary to define the social good in the light of an analysis of the constitutional determinations of a particular political society. The question what behavior should be made criminal is, therefore, in part answerable by rational analysis, common knowledge, empirical investigation, and an evaluation of the consequences of behavior in terms of some definition of the welfare of the state.⁴¹

We can now turn to the other factor which determines what behavior should be made criminal. The chief considerations here are, first, the enforceability of a law; second, the effects of a law; and, third, the existence of other means to protect society against the undesirable behavior. It is clear that laws which cannot be enforced should not be made; hence behavior, the legal prohibition of which cannot be enforced, should not be prohibited legally.

Russian and Italian criminal codes with the advent of communism and fascism and by a comparison of American codes with them. For example, the main emphasis in the new Russian code is upon the protection of certain political and economic interests of the Russian State. In the American codes, political crimes affecting the state are, with the exception of treason, relatively few and of much less significance.

⁴¹Bentham's discussion of preventive legislation illustrates this point nicely. To prohibit the carrying of firearms is to prohibit behavior which in itself cannot be deemed socially malevolent; but it is known that the carrying of firearms is a condition of their use in socially undesirable ways; hence the justifiability of the prohibition.

If the social consequences of the enforcement of a law are themselves undesirable,⁴² for one reason or another, it may be difficult to determine whether the behavior in question should be prohibited. The decision may rest in part upon the balance of the disadvantages involved or upon the availability of other than legal means of preventing the undesirable behavior. Empirical investigation may be needed to decide questions of this sort. In some cases it may be impossible to answer the question except by the hazard of guesses or opinions.

The foregoing discussion can now be briefly summarized. The criteria to be employed in answering the question what behavior should be made criminal are perfectly clear in the light of the conception of the criminal law as a means to the social good, but the application of these criteria is not uniformly clear and unambiguous. In some cases rational analysis and empirical knowledge may provide a determination of the behavior to be made criminal and render making it criminal highly justifiable. In other cases rational analysis may be inadequate and empirical knowledge insufficient to determine the behavior to be made criminal, or to justify its legal prohibition except as a matter of opinion, the contrary of which is also tenable. In short, our understanding of criminal justice does not by itself indicate the justifiability or unjustifiability of particular laws. Every particular law is a conventional and arbitrary determination of justice and we can only make and evaluate this determination in the light of knowledge which is not contained in the definition of justice itself. To know that the criminal law must serve the common good is to know that the criminal law should prohibit politically undesirable behavior whenever such prohibitions are themselves not more undesirable, but this it not to know what particular acts are socially undesirable or when legal prohibitions are less disadvantageous than the acts which they seek to prevent.

A number of negative conclusions can be drawn from this analysis of the behavior content of the criminal law. As it exists,

⁴²Laws prohibiting commercialized vice furnish an example which illustrates this

the criminal law is devised to serve the inconsistent ends of social welfare and punitive retribution. Due to this inconsistency in its actual ends, the behavior content of the criminal law is confused, particularly with respect to the classification and gradation of offenses and with respect to the concepts of responsibility and culpability.

The distinction between felonies and misdemeanors is based in part on the distinction between *mala in se* and *mala prohibita*, and in part on the distinction between common law crimes and statutory crimes. But neither of these distinctions justifies the gradation of offenses according to their gravity. Such gradations can be justified only by reference to the end of retributive justice, which is supposed to require that the severity of the punishment be proportional to the gravity of the offense.⁴⁸ But if, as we have seen, criminal justice should not be retributive justice, it follows that the purpose of the treatment of offenders is not retaliation for the offense committed and, hence, that modes of treatment should be determined without reference to the nature of the offense. The distinction between felonies and misdemeanors is symptomatic of the punitive character of the existing criminal law. With the exception already noted, there is no need in a non-punitive system for any gradation or classification of offenses according to their gravity. Thus, the subdivision of such crimes as murder and larceny into a number of offenses differing in their gravity has no significance except in relation

⁴⁸There is one possible exception to this statement. As Blackstone points out (*Commentaries*, Book IV, Ch. 1), if our interest is to deter criminal behavior, and if we believe that punishment is a deterrent and that the greater its severity the greater is its deterrent influence, and if we believe that it is more important for the social good to prevent certain types of criminal behavior than others, *then* it may be expedient to order offenses according to their gravity, so that punishments can be apportioned in severity in order to achieve the desired deterrent effects. But it must be remembered that this is incomplete as a justification for the apportionment of the severity of punishments to the gravity of offenses, since the reformatory effects of treatment must also be considered. It may be more advantageous to the social good not to punish offenders with severity apportioned to the gravity of their offenses when both reformation and deterrence are considered. It must, furthermore, be remembered that we do not at present know the precise deterrent influence of punishment, we do not know that the greater the severity of punishment is, the greater is its deterrent influence. Gradation of offenses in gravity can have significance in a non-punitive system only in so far as deterrence is concerned, but they must not be retained as a scheme of awarding penal deserts.

to retribution. If the end of the criminal law be the social good, there can be no justification⁴⁴ for any classification or subdivision of offenses in order to apportion to them punishments differing in severity.⁴⁵

The concept of responsibility is another symptom of the punitive character of the existing criminal law. The distinction between responsible and irresponsible individuals is significant only in the light of the conception of the criminal law as an attempt to punish them for their sins.⁴⁶ In this conception a crime must be an act of free will, and only a free moral agent can justly be held criminally responsible for his acts. But if the criminal law be properly conceived, a crime can be defined without any reference to the concept of responsibility. There is then no need for differentiation between the responsible and the irresponsible, between individuals upon whom it is just to visit retributive punishment and individuals whom it is unjust to punish. The justifiability of treatment is determined by reference to its effects, and not by reference to the free will of a moral agent. The treatment of insane offenders, for example, should be determined by the effects of different kinds of treatment upon such individuals. The only justification for according different treatment to insane and sane offenders must rest upon the effects of the treatment

⁴⁴Except the possible justification in terms of deterrence, suggested by Blackstone, to which we have referred

⁴⁵These inconsistencies are strikingly manifest in Blackstone's discussion of the nature of crimes and their punishment (*Commentaries*, Book IV, Ch 1). Although Blackstone views the law as rules, which the sovereign power has thought proper to establish for the government and tranquility of the whole, and although he considers the ends of punishment to be deterrence, reformation and incapacitation, and never atonement or expiation, he nevertheless discusses the measure of punishment in terms of the gravity of the offense. It must be said in his favor that he is dissatisfied with *lex talionis* as a determination of the measure of punishment, but he fails clearly to appreciate that there is no necessary relation between the nature of the offense and the treatment of the offender

⁴⁶It should be pointed out that the justification of punishment depends upon the conception of the free moral agent and his responsibility. As Bradley so clearly shows (*op cit*, p 26, *et seq*), responsibility and liability to punishment are convertible. When the former is meaningless, so is the latter, and conversely. The punitive theory is usually defended on the ground that to deny the justice of punishment is to deny that individuals are responsible, which involves the denial that they are free moral agents. But, of course, it does not follow, first, that if men are free moral agents, punishment is necessarily just, or, second, that the non-punitive theory cannot be maintained because it involves the denial that man is a free moral agent.

and not upon the classification of the insane as morally irresponsible.

According to the punitive theory, it is generally regarded as unjust to punish even the responsible individual unless he is also culpable, that is, in some way at fault.⁴⁷ It is unjust to punish him if his act or its results were accidental or fortuitous. The definition of culpability thus rests upon the distinction between accidental behavior, on the one hand, and intentional or negligent behavior, on the other.⁴⁸ It would manifestly be absurd to prohibit accidents, whatever their consequences, or to attempt by punishment or other means of treatment to prevent them; and to this extent culpability would seem to be an essential element of criminal behavior in a non-punitive as well as in a punitive system. But in a non-punitive system it would be unnecessary to employ the concept of culpability in order to determine how severely to punish offenders. In a non-punitive system, such distinctions as those between intentional and negligent conduct, between conduct which is intentional in the sense that its harm-

⁴⁷Except for petty offenses

⁴⁸Intention and negligence in this connection are terms of art, and they should not be read with their popular meanings. Holmes has made their technical meaning, and hence the notion of culpability, very clear. In *The Common Law*, pp 75-76, he wrote:

"All acts are indifferent *per se*."

"In the characteristic type of substantive crime acts are rendered criminal because they are done under circumstances in which they will probably cause some harm which the law seeks to prevent."

"The test of criminality in such cases is the degree of danger shown by experience to attend that act under those circumstances."

"In such cases the *mens rea*, or actual wickedness of the party, is wholly unnecessary and all reference to the state of his consciousness is misleading if it means anything more than that the circumstances in connection with which the tendency of his act is judged are the circumstances known to him. Even the requirement of knowledge is subject to certain limitations. A man must find out at his peril things which a reasonable and prudent man would have inferred from the things actually known. In some cases, especially of statutory crimes, he must go even further, and, when he knows certain facts, must find out at his peril whether the other facts are present which would make the act criminal. . . ."

"In some cases it may be that the consequence of the act, under the circumstances, must be actually foreseen, if it is a consequence which a prudent man would not have foreseen. . . ."

"In some cases, actual malice or intent, in the common meaning of those words, is an element in crime. But it will be found that, when it is so, it is because the act when done maliciously is followed by harm which would not have followed the act alone, or because the intent raises a strong probability that an act, innocent in itself, will be followed by other acts or events in connection with which it will accomplish the result sought to be prevented by the law."

ful consequences were actually foreseen and conduct which is intentional only in the sense that it should have been foreseen that it would probably have harmful consequences, and between gross negligence and some lesser degree of negligence, can be significant only if it is discovered that the social welfare requires that offenders thus differentiated be treated differently. These distinctions are merely some among many which it may be desirable to make in order to classify offenders for the purpose of treating them with optimal effect.

The question what behavior should be made criminal is thus answerable without reference to the question how should offenders be treated. The most important consequence of the independence of these two problems is the elimination from the behavior content of the criminal law of the penal gradation of offenses and the concept of responsibility.

Section 4. How Should Criminals be Treated.

The provisions of the treatment content of the criminal law are expressed in propositions which define modes of treatment.⁴⁹ Different modes of treatment are prescribed as the legal consequences to be attached to different crimes. Any attempt to correlate modes of treatment with types and grades of offenses is inconsistent with the conception of the criminal law as preventive rather than retributive. Furthermore, if the modes of treatment include non-punitive procedures, that is inconsistent with the idea of retribution, which requires that treatment be exclusively punitive.

We shall, therefore, consider the problem of the treatment of offenders independently of the nature and classification of offenses. Whatever efficacy the criminal law may possess as a device to prevent crime, must result from the application of the modes of treatment which it prescribes to those who commit crimes. It is in terms of their preventive efficacy that modes of treatment should be determined and not by reference to the false

⁴⁹The relation between the treatment content of the criminal law and the administrative code has been previously discussed in Chapter IX.

notion that treatment must be retributive in order to be justifiable. In short, the standard of justice by which propositions expressing the behavior content of the criminal law can be justified, also provides the criteria for the justification of the provisions of its treatment content. The question how should offenders be treated thus becomes the question what modes of treatment are justifiable.

A mode of treatment is justified if it serves the end of the welfare of the state. That the prevention of crime is a means to this end is unquestionable, since crime is deemed to be socially undesirable behavior. But the prevention of crime can be accomplished in a number of different ways. Potential criminals can be deterred from committing crimes; convicted criminals can be incapacitated or reformed, in which case they, too, are prevented from committing crimes.⁵⁰ If one and the same mode of treatment were always equally effective, both as a deterrent and as a reformatory, the problem of determining the modes of treatment would be simply a question of the relative efficacy of different procedures as preventives. Unfortunately, we do not know this to be the case and have grounds for supposing that it is probably not the case, and that deterrence and reformation are in opposition to one another.

Before we consider this problem let us deal with incapacitation as a means of preventing crime. We know what modes of treatment are efficacious with respect to incapacitation with almost perfect certainty.⁵¹ The first question is whether these modes of treatment operate to deter potential offenders and if so, to what degree. While we do not possess definite empirical evidence upon which to base an answer to this question, it is highly probable that they have some deterrent effect. The second question is what offenders should be treated in this way, that is, what

⁵⁰Blackstone, *op cit*, Book IV, Ch 1, makes this analysis. He points out that the one end of preventing future crimes can be effected "either by the amendment of the offender, himself," or "by deterring others by the dread of his example from offending in the like way," or "by depriving the party injuring of the power to do future mischief."

⁵¹There can be no question about execution or life imprisonment as incapacitating procedures. Whether deportation is effective in this respect is, however, questionable, but the question need not be answered for the purposes of the present discussion.

type of offenders is it justifiable to incapacitate. In terms of the social good, it must be answered that it is justifiable to incapacitate only incorrigible offenders. To remove from society an individual who can be reclaimed as a social agent is injurious to the welfare of society. While this is clear, the determination of incorrigibility is not clear. Moreover, it is difficult to decide what risks society should take, that is, whether it should take the chance of incapacitating individuals who are not incorrigible rather than the chance of returning incorrigibles to society. The criteria in terms of which incapacitation is justifiable, can be stated; the class of offenders whom it is justifiable to treat in this way can be defined as incorrigible; but the determination of the justifiability of applying this mode of treatment to particular individuals is rendered difficult and hazardous to the extent that incorrigibility is difficult to determine.

It should be noted that incapacitation is always accomplished by punitive modes of treatment, that is, modes which result in the infliction of pain. But it must be remembered that punishment, in the sense of infliction of pain, is not here punitively directed; that is, incapacitation, however accomplished, is not some amount of retribution proportional to the offense. This is best illustrated in the laws providing for the incapacitation of fourth offenders. Life imprisonment could not be justified as retribution for a trivial fourth offense; it is justifiable, however, as a means for protecting society from an individual whose recidivism is taken as a sign of incorrigibility.

Let us now turn to the deterrence of potential offenders and the reformation of actual offenders as ends to be achieved by the treatment content of the criminal law. If any mode of treatment, whether punitive or non-punitive, is known to be efficacious both as a deterrent and as a reformatory, there can be no question as to its justifiability, but if, on the other hand, it were known that a given mode of treatment were efficacious as a deterrent, but not as a reformatory, or conversely, it would be necessary to choose between deterrence and reformation as means to the social

good, or between specific amounts of deterrence and of reformation, in order to justify the employment of that mode of treatment. It must be remembered, furthermore, that deterrence is the influence which a mode of treatment exerts upon the entire population, whereas reformation is the influence which a mode of treatment exerts only upon that class of offenders to whom it is applied. The justifiability of a mode of treatment as a deterrent is, therefore, to be determined differently and separately from its justifiability as a reformative. The difficulty resulting from the separation of deterrence and reformation in the justification of modes of treatment may be an insuperable one. Thus, for instance, it may be discovered that the infliction of pain is more effective as a deterrent than non-punitive modes of treatment and that the greater the pain inflicted the greater the deterrence. It may also be discovered that treatment is more effective in the reformation of all classes of offenders, or of most classes of offenders, to the extent that it is non-punitive. Were this known, it would be necessary to decide whether deterrence or reformation is the more effective means to the common good, or whether some compromise can be made between these opposing means. Questions of this sort may be forever unanswered and our determination of the justifiable modes of treating offenders may forever rest upon guesses or conjectures.

Many discussions of the treatment content of the criminal law, particularly of punitive as against non-punitive modes of treatment, reach easy conclusions because of an inadequate formulation of the problem. Thus, if only deterrence is considered, punitive treatment can be justified on the probability that fear of pain exerts a restraining influence. If reformation, on the other hand, be alone considered, non-punitive methods of treatment can be offered as justifiable on the probability that offenders can be educated and trained. Each of these proposals faces only half the problem. Even if both of these probabilities were supported by clear empirical evidence, which, as we have seen, is not the case, it would be necessary to determine the comparative social

benefits of deterrence and reformation, or at least an optimal compromise between them.⁵²

It is clear that we do not at present possess enough knowledge to determine the justifiability of any mode of treatment in terms of its reformatory or its deterrent efficacy. Unlike the behavior content of the criminal law, which can be determined in part by rational analysis and common knowledge and experience, the treatment content requires knowledge of a sort that we can not possess without extensive research. Research has so far failed to provide us with this knowledge.

The criteria by which the justifiability of modes of treatment can be determined, entail a number of negative conclusions. In the first place, the argument which is advanced against the individualization of treatment as unjust is clearly invalid. By the individualization of treatment is meant the employment of modes of treatment, whether punitive or non-punitive, which must be differently contrived to be suitable as reformatives to different types of offenders. It is objected that the individualization of treatment, by adapting the treatment to the offender rather than to the offense, is unjust on two grounds: first, that it fails to maintain the proportion between the gravity of the offense and the severity of the punishment; and, second, that the law is not uniformly administered since individuals committing the same offense may be differently treated, if they are of different types, or individuals committing different offenses may be similarly treated, if they are of the same type. We can dismiss the first objection as grounded in the fallacious notion of retributive justice. While the second objection is correct in so far as it identifies a just with a uniform administration of law, uniformity can be achieved with respect to types of offenders as

⁵²Thus, in his *Theory of Legislation*, Bentham discusses treatment almost exclusively with respect to its deterrent effects and, therefore, considers only punitive modes of treatment; on the other hand, the Italian positivists consider treatment almost exclusively with respect to its reformatory effects and hence are concerned only with the suitability of various kinds of non-punitive treatment for different kinds of offenders. The medieval thinkers and Blackstone, who is profoundly influenced by Aquinas, through Hooker and Grotius, viewed treatment both with respect to the ends of deterrence and reformation, but, unfortunately, did not conceive of any non-punitive modes of treatment.

well as with respect to kinds of offenses; that is, individualization of treatment does not mean what the words say, namely, that every individual is a unique case to be differently treated, but rather that individuals can be classified and that treatment should be adapted to types of individuals rather than to kinds of offenses. Uniformity would be secured in so far as all offenders of a certain type were treated similarly, regardless of the nature of their offenses. It must be understood that we are not here justifying the program of individualization of treatment. We do not know what the deterrent effects of that procedure would be nor, as a matter of fact, to what extent it would reform offenders. We are merely answering objections which have invalidly held this plan to be clearly unjust.

In the second place, it has been incorrectly supposed that if the end of the criminal law is not retributive, its treatment content should be entirely non-punitive. While it is true that a criminal law, designed to do retributive justice, must be entirely punitive, it is not true that a criminal law designed to protect the welfare of the state must be entirely non-punitive. The justifiability of a mode of treatment is based upon the same criteria, whether it be punitive or non-punitive.⁵³ Finally, it must be pointed out that although we do not at present possess the knowledge requisite to a proper determination of the treatment of offenders with a view to the social welfare, we cannot evade the responsibility which the conception of the criminal law, as a means to deterrence and reformation, places upon us in this connection. We cannot avoid the problem of determining what modes of treatment are justifiable, by recourse to the erroneous notion of retributive justice. If in our present state of ignorance we are compelled to base the treatment provisions of the criminal law upon conjectures, we should at least recognize that we do not

⁵³We shall not discuss the proposal that every sentence should be indeterminate, in order that treatment be properly individualized; nor shall we discuss the problem of the protection of offenders against administrative abuses in a system in which a wholly indeterminate sentence prevails. The problems are only significant on the supposition that it is justifiable to individualize treatment with a view to achieving reformation. This justification is, of course, unfounded; we do not at present possess knowledge which would make it possible to support this claim.

at present know that any of these provisions is justified. If formulating the treatment content of the criminal law is a work of trial and error, we should recognize it as such instead of defending its propositions by prejudices, unfounded opinions, or such erroneous conceptions as that of retributive justice. We may never be able to determine justifiable ways of treating offenders. But that should not lead us to ignore the nature of justice.

Section 5. Knowledge of the Criminal Law.

The theoretical questions which have been discussed in the preceding sections can be answered without reference to the content of any existing body of criminal law. To say what should be the end of the criminal law requires one to go into the fields of ethics and politics; to say what behavior should be made criminal and how criminals should be treated requires, in addition to knowledge of ethics and politics, knowledge which has not yet been made available by the so-called social sciences and by criminology, in particular. But other theoretical questions can be asked about the criminal law, to answer which only knowledge of the criminal law is needed. These questions are all concerned either with the present or with the past content of a given body of criminal law or with the contents of two or more bodies of criminal law. The knowledge which answers these questions constitutes the history and the science of criminal law.

It is not our purpose here to present the outlines of the history or of the science of criminal law. We wish merely to indicate the nature of these fields of study and to evaluate work which has been done in them.

A history of the criminal law must be knowledge of its development; it must afford a chronological arrangement of its various provisions; it must, however, be more than merely a recital of the date, place and occasion of rules of law; it must provide a description of the circumstances which attended changes in the criminal law and an account of the effects of these changes upon its administration. While we have short historical sketches

of the primitive origins of criminal law in Western Europe, we do not at present possess an adequate historical account of Anglo-American criminal law.⁵⁴

A comparative study of the criminal law of different countries is another type of approach to criminal law. It provides knowledge of the similarities and differences of various criminal codes. Against the background of these comparisons the peculiarity of any given body of criminal law is revealed. The importance of this revelation is that it makes clear the arbitrary and conventional determinations which are necessarily present but can be known only through such comparisons. The distinction between *mala in se* and *mala prohibita* can often be made only in the light of a comparative study of the criminal codes of civilized nations. The provincial character of *mala prohibita* is exhibited as a product of local prejudices. Furthermore, in the absence of knowledge which can properly determine what behavior should be made criminal and how criminals should be treated, a comparative study of various criminal codes affords knowledge of the ways in which different countries have undertaken legislation by trial and error. Insights thus gained may be useful to guide and encourage experimental legislation, if trial and error can be so dignified.

The Anglo-American literature of the criminal law is singularly lacking in comparative jurisprudence. This is in marked contrast to the literature of the criminal law of the various countries of continental Europe.⁵⁵

We turn, therefore, to an examination of our knowledge of our own criminal law as it presently exists. This knowledge may take two forms. It may be purely information or it may be developed into a rational science of the criminal law. If our knowledge consists of no more than is contained in some compilation

⁵⁴For a comprehensive survey of Continental Criminal Law and the first volume of Von Hippel's *Deutsches Strafrecht*.

⁵⁵There is nothing in English which approaches in scholarship, scope or thoroughness the monumental comparative study of the criminal law embodied in *Vergleichende Darstellung des deutschen und ausländischen Strafrechts*, which is in 16 volumes.

of the rules of the criminal law it is information, the validity of which can be estimated only by reference to the cases which have or have not applied the rules, or have applied them differently; but if our knowledge consists of a systemization of these rules, established by the definition and ordering of the concepts of the criminal law, it takes the form of a rational science.

Knowledge of the criminal law must be understood as entirely retrospective. It consists in knowing what the content of the criminal law has been. To the extent that this knowledge is developed into a rational science, inconsistencies and confusions in the existing provisions may be indicated and the basis of their clarification suggested. A science of the criminal law must be distinguished from the art of legislation, which is concerned with changing the content of the criminal law by addition or subtraction. The problem of constructing a rational code of criminal law is a legislative problem but one which can be solved only in the light of a rational science of the criminal law. In other words, the art of making laws or of constructing codes depends in part upon a knowledge of laws already existent and applied, and to the extent that one aims at rational legislation or codification,⁵⁶ one must possess a rational analysis of the subject matter of the criminal law. On the other hand, the scientific inquiry can be undertaken without any practical interest in legislative action.

The subject matter of the criminal law consists of its statutes and other rules which judges apply in their decisions of cases. Whether the proposition applied to a given case as the rule governing its decision is a common law proposition having authority by judicial precedent or whether it is a legislative enactment, the application of the proposition as the rule of a new case, always involves some interpretation of its meaning. The subject matter of the criminal law must, therefore, include the judicial opinions in which the rules are interpreted and applied to specific cases. To know the subject matter of the criminal law

⁵⁶A compilation of statutes and common law rules is often called a code of criminal law, but such compilations and arrangements must be distinguished from a genuine code which is always a system of legal propositions which can be developed only in the light of a rational science of the subject matter of the criminal law.

is, therefore, clearly not an easy task. It cannot be known merely by recourse to recorded statutes; nor can it be known by reference to some textbook compilation of common law rules. It can be known only through an analytical study of the statutes and the case materials of the criminal law.

Judges are not jurists in the performance of their judicial function. They are primarily administrative officers whose task is to decide the cases brought before them. In so far as judges by interpretation extend or modify the law, they are legislators. They can and do perform these tasks without creating a science of the criminal law, although in the formulation of their decisions it may be necessary for them to answer theoretical questions. Their opinions reflect and express their answers to the theoretical questions raised by the cases before them, but their opinions can be no more than fragmentary attempts to analyze that part of the criminal law which is relevant to the case being decided. Judicial opinions, therefore, provide the material of, but do not constitute a science of, the criminal law.

The jurist performs no practical service. He is neither administrator nor legislator. Free of practical exigencies, he can undertake a systematic analysis of the subject matter of the criminal law. By systematic analysis we mean, first, the definition of the concepts to be found in, or presupposed by, the rules of law; second, the ordering of these concepts according to their generality and subordination; third, the indication of the incompleteness of the existing body of rules; and, fourth, the clarification of confusions and inconsistencies in that body of rules.

The knowledge which one would possess of the criminal law upon the completion of such an analytical study of it, would constitute a rational science. In the first place, such knowledge would rest upon a rational base. Propositions of the criminal law do not provide their own foundation. As we have seen, the behavior content of the criminal law attempts to define specific crimes, but never defines crime. The propositions of the criminal law do not formulate the bases of criminal liability. A rational knowledge of the criminal law must, therefore, be founded in

propositions of a generality greater than that possessed by any propositions which are rules of criminal law. These more general propositions are the definitions of the generic concepts in terms of which the significance of the rules must be interpreted, and by reference to which they must be systematically ordered.⁶⁷ In the second place, such knowledge of the criminal law would constitute a rational science in the sense that it would be achieved solely by rational techniques of definition and analysis. Its materials would be propositions. It would require no observational process and would in no sense depend upon empirical knowledge of the administration of the criminal law.

The existing Anglo-American criminal law is a texture of inconsistencies and confusions which have resulted from inconsistent conceptions of the ends it should serve and from the unsystematic and haphazard nature of its development. The inconsistencies and confusions are revealed in such concepts as felony, misdemeanor and responsibility, in the inadequate and overlapping definitions of particular crimes, and in the provisions of the treatment content, which are both punitive and non-punitive. These confusions and inconsistencies can be clarified by rational analysis; they cannot, of course, be eliminated or corrected except by rational legislation, but such legislation requires the antecedent development of the rational science by which it must be guided.

A rational science of the Anglo-American criminal law does not now exist. At most, there are fugitive articles in technical journals which aim at the clarification by rational analysis of some small portion of the total field. In method and purpose some of these articles are admirable; the traditional techniques of legal analysis are thoroughly rational. But these articles are

⁶⁷Holmes's chapter on the criminal law in his *Common Law* is an excellent example of an attempt to lay the foundations for a rational analysis of the criminal law. In it Holmes undertakes to define the concepts of criminal justice, crime, and the bases of criminal liability. He applies this analysis illustratively but not adequately. Upon a base of the sort which Holmes provides, a rational science of the criminal law could be constructed by a painstaking effort to systematize the provisions of the criminal law.

isolated and fragmentary. They do not satisfy the need for systematic and comprehensive construction.⁵⁸

Existing textbooks and commentaries are at best merely compilations of statutes and rules under conventional and uncriticised rubrics.⁵⁹ The case books employed in legal instruction clearly exhibit the absence of any systematic analysis of the provisions of the criminal law.⁶⁰ The textbooks and commentaries merely summarize a field of knowledge, more or less accurately. Such summaries reveal many ambiguities, confusions and inconsistencies in the statutes and common law rules; the cases,

⁵⁸It should also be added that most of them do not attempt to base their analysis upon the kind of foundation which Holmes lays in his chapter. The importance and method of a rational study of law is clearly stated by him in *The Path of the Law* (Collected legal papers. New York: Harcourt Brace & Howe, 1920, pp 197-198). "The way to gain a liberal view of your subject is not to read something else, but to get to the bottom of the subject itself. The means of doing that are, in the first place, to follow the existing body of dogma into its highest generalizations by the help of jurisprudence; next, to discover from history how it has come to be what it is; and, finally, so far as you can, to consider the ends which the several rules seek to accomplish, the reasons why those ends are desired, what is given up to gain them, and whether they are worth their price. We have too little theory in the law rather than too much."

⁵⁹If one would appreciate how backward American legal scholarship has been in the field of the criminal law, he has only to compare the standard American treatises on the criminal law, such as Bishop's, Wharton's and McLain's, with such European treatises as Von Listz's *Lehrbuch des Deutschen Strafrechts*, Von Hippel's *Deutsches Strafrecht*, Garraud's *Trat   Th  orique et Pratique du Droit P  nal*, Carrara's *Programma*, Manzini's *Trattato di Diritto Penale Italiano*, and Florian's *Trattato di Diritto Penale*.

⁶⁰These text books and case books reflect the level of instruction in the criminal law which currently prevails in American law schools. The criminal law is for the most part studied as a set of rules without rational foundation or systematic order. The student becomes acquainted with the ambiguities and inconsistencies but is not directed toward the solution of the difficulties thus raised. Furthermore, unless a student takes a course in the philosophy of law his appreciation of the purpose and content of the criminal law is unenlightened by any understanding of the nature of justice. In so far as American law schools are beginning to supplement the traditional instruction in criminal law or procedure, they are doing so by offering instruction, of a more or less superficial character, in criminology and in the empirical aspects of the administration of the criminal law, using for the latter purpose materials gathered from research such as we surveyed in Chapter IX. There is no tendency discernible to study or teach the criminal law as the subject-matter of a rational science. Indeed, the whole contemporary movement in legal research and education is in the direction of the empirical and away from the rational. This movement is denominated realism. In so far as realism emphasizes the utility of empirical knowledge in the solution of the practical problems which confront the legislator, the judge and the lawyer throughout the entire domain of law, and the need for empirical sciences which will supply that knowledge, realism or realistic jurisprudence is performing a real service. But in so far as it ignores or underestimates the importance of the development of a rational science of law and the utility of rational knowledge in the solution of such problems, it is performing a disservice.

furthermore, reveal inadequate and inconsistent judicial interpretations of these rules. No attempt has been made to clarify the subject matter of the criminal law by the construction of a rational science. The kind of restatement which the American Law Institute has made of other bodies of substantive law may be attempted in the field of criminal law. Such a restatement, however, would not constitute a rational science. It would not be the drafting of a rational code. The aim of such a restatement would be merely to summarize the existing law.⁶¹

This completes our examination of the theoretical problems of the criminal law. We shall turn in the subsequent section to the practical problems of legislation and judicial administration. In the light of these problems, the practical value of an adequately developed philosophy and science of the criminal law will become apparent.

Section 6. Legislation by Trial and Error.

Legislation is the art of making laws. It is a practical activity, and the problems of the legislator are primarily practical problems. In the field of criminal legislation he is required to decide what behavior shall be made criminal and how criminals shall be treated. These problems cannot be understood without reference to the position of the legislator at a given time and place; that is, the problems of legislation must be differently approached according as there exists an intricate body of criminal law or the task is to create one *de novo*. In the latter case the legisla-

⁶¹A joint committee representing the American Law Institute, The Association of American Law Schools and The American Bar Association have recommended that the Law Institute not only restate the "common law of crimes" but prepare a code of criminal law (Report of the Joint Committee on the Improvement of Criminal Justice, p. 15). The committee say that "although the restatement will be a statement of what the law is and the code of what it should be, the work involved is essentially a unit. The one depends upon and is an evolutionary product of the other." We think that our discussion in the text makes clear what a naive conception this is of what is involved in the construction of a code. The committee seem to be of the opinion that only empirical knowledge, in addition to the collection and comparative study of existing statutory material and interpretative decisions, is needed to construct a code; and that empirical knowledge alone, "facts", will answer the questions what *should* be the end of the criminal law, what behavior *should* be made criminal, and how criminals *should* be treated. There is a raw empiricism in criminal justice as well as in criminology.

tor would be free to draft a code of criminal law; in the former he can only amend and amplify an existing body of rules.

The problems of criminal legislation today must therefore be understood in terms of the characteristics of existing criminal law. These can be briefly summarized as follows: (1) The criminal law serves inconsistent ends. On the one hand, the fact that it provides both punitive and non-punitive modes of treatment,⁶² and the fact that it prohibits many kinds of behavior which are not qualified by moral turpitude but are prohibited because their social consequences are contrary to the welfare of the state,⁶³ as presently constituted, quite clearly show that our criminal law is not exclusively the instrument of so-called retributive justice. On the other hand, the fact that crimes are classified and subdivided with respect to gradations in gravity,⁶⁴ and the fact that the severity of punitive treatment is proportioned to the gravity of the offense, are clear indication that our criminal law is not entirely devised as an instrument for protecting and preserving the welfare of the state by means of the prevention of crime through deterrence, reformation, and incapacitation. In short, our criminal law, throughout the provisions of its behavior and treatment contents, exhibits the inconsistencies which necessarily follow from its devotion to utterly inconsistent ends.⁶⁵

(2) The behavior content of our criminal law is inadequate and incoherently developed. This is in part due to the diverse origin of the rules in common law and in statutory enactment. But both the statutory and the common law provisions present a picture of defective definition and confused determination of

⁶²Probation, parole and the distinction between adult and juvenile offenders are instances of non-punitive modes of treatment.

⁶³All of the crimes which are traditionally called *mala prohibita* exemplify this point. It will be remembered that a system of criminal law devoted to retributive punishment cannot consistently prohibit behavior which although socially undesirable is not qualified by moral turpitude.

⁶⁴The classification of crimes into felonies and misdemeanors, the subdivision of murder into degrees, of larceny into petit and grand, etc., illustrate this point.

⁶⁵In European criminal codes and in current European legislation the inconsistency of these two ends is recognized, and some attempt is made at least to effect a compromise between them. However unsuccessful this must necessarily be, it is better than the American practice of ignoring the problem.

specific crimes.⁶⁶ The distinction between felonies and misdemeanors is relatively indeterminate. Such concepts as responsibility, culpability, intent and negligence are employed without a clarification of their ambiguities. The behavior content of the criminal law, in short, is not developed in the light of a rational analysis of the bases of criminal liability.

(3) The treatment content of our criminal law presents a picture of inconsistent efforts to punish, on the one hand, and to reform and deter, on the other. Furthermore, the contrivance of modes of treatment with a view to deterrence and reformation represents guesses, and should therefore be the creation of tentative practices. But the treatment content of the criminal law does not reflect our ignorance of the effects of treatment. The degree to which it is determinate and fixed is not justified by knowledge. Finally, the treatment provisions of the criminal law are not properly coordinated with the provisions of the administrative code which must regulate the application and execution of the provisions of the treatment content.⁶⁷

The practical problem of wisely amending and amplifying such a body of criminal law is extremely difficult, if not impossible. Faced with this problem a legislator can do little more than patch and tinker; until the basic inconsistencies are uprooted, rational legislation is not possible. If the basic inconsistencies were removed, if the legislator recognized that the aim of the criminal law is the welfare of the state and not punitive retribution, rational criminal legislation could be undertaken. But this would necessitate the drafting of a new criminal code.

⁶⁶An examination of the statutes and the cases dealing with homicide is a striking illustration of this point. An offense should be defined so as to include only the type of conduct which it is designed to prohibit. See E. Freund's discussion of the failure of the American criminal law to delimit clearly what constitutes prohibited conduct in its definition of offenses. The classification and definition of crimes. *J. Crim. Law and Criminol.* 1915, 5, 807-826.

⁶⁷Thus, modes of treatment are prescribed by the criminal code which require certain physical and other facilities for their application, and no provision is made by the administrative code for these facilities. The criminal code may prescribe certain kinds of treatment for criminals or delinquents who are mentally defective, which can be applied only by a trained personnel employing special physical facilities, and the administrative code may fail to provide both the needed personnel and the needed physical facilities.

We cannot discuss here the problems or the procedures of any except a rational legislator. By the rational legislator we mean one who attempts to answer such questions as what *shall* be the end of the criminal law, what behavior *shall* be prohibited, how *shall* offenders be treated, in the light of answers given to the parallel theoretical questions what *should* be the end of the criminal law, what behavior *should* be prohibited, how *should* criminals be treated. The existing body of criminal law is essentially a product of irrational legislation, either by the judiciary or by legislatures. With respect to specific provisions of its behavior and treatment content, it could not have been otherwise, since the knowledge required for a rational determination of these provisions does not yet exist. But empirical knowledge is not needed for the definition of the end of the criminal law and for the proper conception of criminal justice. To say that the legislation which has produced the criminal law is essentially irrational, is to say that it is not philosophically enlightened, that it is not directed by an understanding of the ethical and political considerations which are basic to criminal jurisprudence.

We must be content, therefore, to indicate the conditions of rational criminal legislation. The rational legislator must, first of all, appreciate that the criminal law is an instrument whereby to achieve the welfare of the state. He must recognize that the welfare of the state is determined by the nature of any political society and by the constitution of the particular state which he serves.⁶⁸ In short, the rational sciences of ethics and politics must aid the legislator in defining the specific interests which the provisions of the criminal law should be designed to protect. Unless these interests are defined, it is impossible to

⁶⁸By the constitution of the state we mean its peculiar political structure, its economic structure, and the social aims which its political and economic organization is intended to serve. That is, the legislator must have knowledge of intermediate ends which are means to the welfare of the state. These ends are the various social interests which at a given time are thought to be for the common good; while the common good always remains the ultimate end of criminal legislation, the determination of the conditions upon which it depends, changes from time to time and from society to society. The process of legislation must, therefore, be guided by explicit analysis of the constitution of the state. The justice of criminal legislation must be determined relatively to the nature of a given state.

evaluate behavior as socially undesirable. Empirical knowledge of the consequences of behavior does not by itself ever supply the criteria by which these consequences shall be judged as being for or against the common good. The standards of evaluation must be rationally determined.

But the solution of the basic problem of criminal jurisprudence, that is, the end of criminal law and the definition of the criteria of evaluation, does not suffice to decide specific questions about the behavior and treatment contents of the criminal law. Although the rational legislator may know what in general is justifiable, he will not necessarily know whether a particular positive rule of law is justified to a definite degree. Empirical knowledge is thus required with respect to specific provisions of the behavior content of the criminal law. Common knowledge and experience may suffice to indicate that certain types of behavior should be prohibited; but in other cases it may be necessary to ascertain the social consequences of behavior by empirical investigation. Common knowledge and experience may need to be supplemented by research in order to define with sufficient precision the nature of the behavior to be prohibited. With respect to specific provisions of the treatment content, common knowledge and experience are much less useful to the legislator. It is a common sense generalization of high probability that punishment acts as a deterrent, but this knowledge is not precise enough for his purposes. He must know the relative deterrent effects of different modes of punitive treatment and the relative deterrent and reformative effects of different modes of punitive and non-punitive treatment. The problems of empirical research in this field are, as we have already said, extremely complicated and difficult. But they must be solved. Knowledge of the effects of treatment must be available if the treatment content of the criminal law is to be rationally determined. It should be remembered that knowledge may be forever inadequate to make this determination because of the opposition between the ends of deterrence and reformation, and because it may never be possible

to know which of these ends is preferable as a means to the common good.

A rational legislator would be aided, furthermore, by knowledge of existing and past bodies of criminal law. A history of the criminal law and a comparative study of various existing criminal codes would serve to supplement the legislator's inadequate knowledge of the consequences of various types of behavior and the consequences of legislation itself.⁶⁹ To the degree that the knowledge which a legislator possesses with respect to the existing criminal law was developed as a rational science, he would be able to base his legislation upon an analysis of the nature of crime and of criminal liability. Furthermore, a rational science of the criminal law would aid the legislator in drafting new provisions to avoid the ambiguities, confusions and inconsistencies which it had revealed.

Finally, a rational legislator must have empirical knowledge of the administration of the criminal law. He ought to know how the various provisions of the criminal law work in fact. He must know the social consequences of criminal legislation and of the administration of the criminal law. If there are alternative non-legal means of protecting society against the effects of the behavior in question, his decision to make the behavior criminal must be based upon the choice of the legal means as the one most conducive to furthering the social interests at stake. In short, he needs knowledge in order to decide whether the disadvantages resulting from the enforcement of legal provisions outweigh the disadvantages of the behavior prohibited.

The legislator requires knowledge of the administration of the criminal law in order to solve its administrative problems, in so far as these can be solved by changes in the administrative code. It is not sufficient that the criminal law be devised to achieve the ultimate end of the social welfare; the legislator must construct an administrative code which will achieve efficient administration of the criminal law. To do this he must know the factors

⁶⁹A comparative study of criminal codes is extremely useful in the trial process of legislation.

upon which such efficiency depends. He must know which of the various means which are now employed are more or less efficient, in order to choose among them. It is only by knowledge or analysis of the conditions of efficiency that he can devise the most effective administrative machinery. The drafting of provisions of the administrative code thus depends upon empirical knowledge, some of which may be the result of common experience and some of which may be sought by research, in the same way as does the drafting of provisions of the criminal code.

The problem of the treatment of offenders is the most crucial problem which a rational legislator faces, because it may be necessary to solve it tentatively in the absence of the requisite knowledge. He must recognize that a definite mode treatment cannot be finally assigned to the infraction of a definite prohibition. He must recognize that treatment may be punitive or non-punitive, and must be adjusted to the potential and actual offender rather than to the nature of the offense. But knowledge of the causes of criminal behavior and of the effects of modes of treatment and other preventive measures is prerequisite to the solution of these problems. In the absence of such knowledge, a rational legislator can take only one step towards their solution; he must create administrative machinery which will make it possible to experiment with modes of treatment when such experimentation can be undertaken. So long as the legislator continues to make the criminal code a penal code, so long as he in great part attaches different kinds of punitive treatment to different kinds of offenses, so long as he deceives himself into believing that he is proceeding on the basis of knowledge, legislation will not only be inconsistent with the end of the criminal law, but will also make it difficult to acquire the empirical knowledge without which the treatment of offenders cannot be properly determined.⁷⁰

⁷⁰The legislator may employ the indeterminate sentence, either wholly indeterminate or indeterminate within certain restrictions, in order to make experimentation possible. He may put such experimentation into the hands of the judge or administrative boards, prison authorities, etc. It is clear, at any rate, that the legislator cannot himself perform the necessary experiments. Legislative individualization of treat-

Current legislative problems, in so far as they are questions about the amendment or amplification of the existing criminal law, can be solved rationally only to the extent that the legislator definitely recognizes the limitation of any partial modification of the existing code. The criminal law can be improved legislatively by a clarification of its content and by attempts to eliminate inconsistencies and ambiguities. Beyond this, however, all proposals for the reform of the criminal law must be viewed at present as proposals for legislative trial and error. The knowledge does not at present exist to do anything else. Where the necessary knowledge does not exist, it can only be acquired by experimental research. Legislation should, therefore, be undertaken tentatively and in the spirit of subservience to the aims of research. This attitude can be induced only by a full appreciation of our need for knowledge.⁷¹

The problems of the judge arise in part from the necessary and intrinsic imperfection of any body of laws. The propositions of the criminal law, as of any other body of law, must always be imperfect as generalizations. Laws always require correction in individual cases. Judges and magistrates must therefore have discretionary power in the application of rules to particular cases.⁷² This discretionary power must be two-fold. With respect

ment can occur only at a time when the legislator possesses sufficient knowledge to prescribe treatment for different precisely defined types of offenders.

⁷¹Our discussion in Chapter VIII of proposals relating to modes of treatment renders it unnecessary to say anything further at this point about the proposals for the amendment of the treatment content of the criminal law. The proposals for the amendment of the behavior content can be classified as follows: (1) Proposals for the repeal of laws which prohibit behavior which is "intimate and trivial," that is, which has no undesirable consequences or none which are extensive enough to be made the subject of legal prohibitions, or which cannot be enforced effectively, either because they run counter to the inveterate habits or moral ideas of a large part of the community, or for some other reason; (2) proposals for the codification of the law; (3) proposals for a reformulation of the criteria of responsibility and of such concepts as malice and premeditation, and for a redefinition of certain crimes, such as murder in its various degrees, in order to bring them into accord with modern psychological 'knowledge' and to eliminate inconsistencies and ambiguities; and (4) proposals to create new crimes, either by enlarging the definition of existing crimes or by creating entirely new offenses. Obviously many of these proposals raise problems which cannot be solved without empirical knowledge, which we may not possess and which we may not be able to obtain without research.

⁷²It is in the exercise of this discretion that the judge is an equitable as well as a just administrator. Aristotle's discussion of the imperfection of laws and the need for their judicial correction is a perfect analysis of the situation. The equitable, he

to the behavior content of the criminal law, the judge must decide whether the given case falls under the definition of a prohibited act; no matter how much knowledge we have, no matter how well developed and systematized our criminal law is, our definitions must remain imperfect in the sense that particular cases may present anomalies. With respect to the treatment content of the criminal law, the judge, or some other official vested with that power, must decide whether the particular offender shall be treated in one of a number of ways. No matter how much knowledge we have of the effects of different kinds of treatment upon different types of offenders, it will always be necessary to decide whether or not a given individual belongs to one or another type; particular cases will always call for the exercise of administrative discretion.

The imperfections of the criminal law must always require its application by equitable administrators.⁷³ The judge must not only know the law in order to do justice according to it, but he must rectify it in particular cases. The imperfections which attend both the work of the legislator and the work of the judge supplement each other. The former, seeking to make just laws, formulates general rules which are imperfect in that they do not apply equally well to all cases.⁷⁴ The latter, seeking to dispose justly of particular cases, corrects the imperfection of the rule

says, is a correction of legal justice; "the reason is that all law is universal, but about some things it is not possible to make a universal statement which shall be correct. In those cases, then, in which it is necessary to speak universally, but not possible to do so correctly, the law takes the usual case, though it is not ignorant of the possibility of error. And it is none the less correct; for the error is not in the law nor in the legislator, but in the nature of the things, since the matter of practical affairs is of this kind from the start . . . Hence, the equitable is just, and better than one kind of justice—not better than absolute justice but better than the error that arises from the absoluteness of the statement, and this is the nature of the equitable, a correction of law where it is defective owing to its universality. In fact, this is the reason why all things are not determined by law, viz., that about some things it is impossible to lay down a law, so that a decree is needed." *Ethics*, V, 10. Also see *Politics*, III.

⁷³We are here using the term equitable strictly in the Aristotelian sense of administrative discretion in the correction of imperfect rules.

⁷⁴Thus, according to the pandects of Justinian (Lib 1, tit 3, art. 2), "laws should be made to suit the majority of instances; and they are not framed according to what may possibly happen in an individual case." For an interesting discussion of the question whether human law should be framed for the community rather than for the individual, see Aquinas, *op. cit.*, Ia IIae, Q. 96, Art. 1.

he applies. In so far as these corrections are established as precedents, they become rules of law and the judge performs a legislative as well as an administrative function. A government of laws without men must be as ineffective as a government of men without laws, unless it be possible to formulate perfect rules or to have cases administered by perfect judges.⁷⁵

In the solution of the practical problems which he faces the judge will be most aided by a rational science of the criminal law. In so far as he exercises a legislative as well as an administrative function, he requires all of the knowledge which the legislator needs. Judicial opinions which accompany the decision of particular cases are legislative documents to the extent that they interpret either statutes or common law rules. The formulation of a rational system of criminal law is, therefore, in the hands of the judge as well as of the legislator. When both the judge and the legislator are jurists as well, when they are students of the criminal law and of criminal jurisprudence as well as its practitioners, we may have a rationally constructed and a rationally administered criminal law.

Ideally the legislator should be the master of all the sciences, both rational and empirical, which are relevant to the phenomena of crime.⁷⁶ In so far as such knowledge is sought because it is useful, it should be gathered largely for the sake of the legislator. To the extent that he is guided by wisdom, by rational analysis, by valid empirical knowledge, and only to that extent, will the criminal law and its administration be justified as a means to the common good.

Section 7. Conclusion: Law and Social Science.

The relation between criminology and criminal justice exemplifies the relation which in general obtains between empirical

⁷⁵For a discussion of the relation of the legislator and the magistrate, see Plato's *Politicus* and Aristotle's *Politics*, III, 1282^b, 1286^b, 1287^a-1287^b. It is interesting to note that the classical analysis is repeated throughout the entire literature of jurisprudence. Thus, for instance, see Williston, *Lectures on some modern tendencies in the law*. New York. Baker, Voorhis & Co., 1929, Ch I.

⁷⁶For the conception of the statesman as a master of the sciences and arts, see Plato's *Politicus*.

knowledge and law. The definition of this relationship formulates the interdependence of the various parts of this book.

Law is not coordinate with either the empirical or the rational sciences. Science is the creature of the theoretical intellect; descriptive knowledge, that is, knowledge of particulars, is the creature of the sensitive intellect; but law is created by the operations of the practical intellect.⁷⁷ This reiterates what has already been said about propositions of law as expressions of decisions and judgments. They do not express knowledge.⁷⁸

The practical intellect is dependent upon the theoretical intellect and the sensitive intellect. This reiterates the point that all practical problems have theoretical aspects. The rational solution of practical problems depends upon knowledge, either the kind of knowledge that the sciences contain or perceptual knowledge of particulars. The field of jurisprudence must, therefore, include not only the study of law but the study of the sciences upon which law depends. Before the rise of the social sciences, the field of jurisprudence had its theoretical branch in the rational sciences of ethics and politics and its practical branch in systems of law. The social sciences had their origin in the employment of empirical methods of research in the field of jurisprudence.⁷⁹ Sociology and politics, as empirical sciences, are the empirical correlatives of the rational sciences of ethics and politics, just as the empirical science of psychology is correlative to the rational science of man. Jurisprudence embraces this whole field of rational and empirical knowledge and organizes it in relation to the science of law, the art of legislation, and the prudence of administration. The nature of this relationship can

⁷⁷Our discussion of the nature of science has made it clear that an empirical science is a product of both the theoretical and the sensitive intellect, whereas a rational science is a product of the theoretical intellect alone.

⁷⁸This must not be misunderstood to mean that the propositions of law cannot constitute the subject matter of a science. When law is viewed in this way we can have a rational, and only a rational, science of it. Knowledge of the administration of the law is knowledge of the activities of officials and institutions, and as such belongs to the domain of empirical science.

⁷⁹Thus, Adam Smith, with whose *Wealth of Nations* modern political economy began, considered that his work was a contribution to the larger field of jurisprudence. Thus, too, economics is one of the subjects dealt with by the faculty of law in the University of Paris and in other European universities.

be simply indicated. The practice of law, which includes legislation in the sense of formulating rules and prudence in the sense of judging and deciding particular cases, derives part of its theoretical guidance from the rational sciences of ethics and politics. But this guidance is merely with respect to the aims which the practice serves and its rational foundation. The practice depends in equal part upon the knowledge afforded by the empirical sciences of man and society. This knowledge directs the practical intellect in making the specific determinations which constitute the propositions of law, and in administering the law.

As we have seen, the practical problems of the criminal law can be rationally solved only if we possess the kind of knowledge which criminology seeks, but has so far failed to give us. Conversely, the practical value of the knowledge which may some day be obtained in the fields of criminology and the other social sciences is primarily its utility in the direction of rational legislation and judicial administration. Law is in this sense the basic technology in the field of human affairs. It stands to the rational sciences of ethics and politics and the empirical social sciences as mechanical and other types of engineering stand in relation to the rational science of mathematics and the empirical physical sciences.⁸⁰

This survey of the fields of criminology and criminal justice has unity if viewed with reference to the task of the statesman. It is he who must have the welfare of the state at heart. He should be the scientist who seeks to know the true good of the community; he should be the artist who attempts to create the means to realize this good. The fields of knowledge which we have surveyed, largely by formulating theoretical questions,—some of which have been, and some of which are not yet, answered,—represent the knowledge which the statesman must possess in order to shape the law as a means to the common good.

⁸⁰The traditional division in English universities of all subject matters into the fields of natural philosophy and science, on the one hand, and moral philosophy and science, on the other, nicely illustrates the point here being made. Moral philosophy and science is co-extensive with the Faculty of Jurisprudence in the structure of a medieval university. Law represents the practice and the art of jurisprudence.

PART FOUR

CONCLUSIONS AND RECOMMENDATIONS

Chapter XII.

AN INSTITUTE OF CRIMINOLOGY AND OF CRIMINAL JUSTICE

Section 1. Introduction.

The phenomenon which we call crime gives rise to the many urgent and perplexing problems which are involved in the administration of the criminal law and in society's efforts to deal with crime and criminals by non-legal institutions and processes. These are practical problems in the sense that they are problems of practice or procedure; they are to be contrasted with theoretical problems which are questions as to knowledge. It may be assumed that it is of the utmost importance to society that the practical problems of crime and, especially, the problem of controlling criminal behavior be wisely solved.

In previous chapters we have ascertained the nature of practical and theoretical problems and how they are related; we have discovered and analyzed the more important and pervasive of the practical problems which have their origin in the existence and prevalence of criminal behavior; we have determined how knowledge can aid in their solution and what knowledge is needed as a condition of their solution; and we have revealed how little of this knowledge is presently available and in what directions and by what methods research must proceed if we are to obtain the knowledge which is so urgently required.

We have discovered an appalling state of ignorance in the fields of criminology and of criminal justice and our impotence,

by reason of our ignorance, to cope with the major practical problems which grow out of crime. It is plain that if we desire to be able to solve those problems wisely, the most practicable way in which we can proceed is to attempt to enlarge our knowledge. If the wise solution of the problems of crime is our goal, it is obviously of much greater importance to endeavor to add to our knowledge than to try to increase the efficiency with which the criminal law is administered, that is, to try to detect a larger proportion of the crimes that are committed, to apprehend, prosecute and convict a larger proportion of the persons who commit crimes, and to subject a larger proportion of criminals to post-conviction treatment.

The only process by which we can obtain the knowledge which we so much need, is the process of scientific research. We believe that such research can best be conducted in a new academic institution organized for that purpose. Our survey of the researches which have so far been executed in the fields of criminology and of criminal justice indicates rather clearly that we cannot rely upon existing research facilities for the knowledge which is needed. It is therefore our purpose in this chapter to state how such an institution should be organized and administered in order to insure that it will do the most effective research.¹ We shall do this in the form of a series of recommendations for the establishment of an institute of criminology and of criminal justice.

We shall first recapitulate the conclusions which we have reached in prior chapters, conclusions with respect to the state of knowledge in the fields of criminology and of criminal justice,

¹If such an institute can at this time contribute to the wise solution of the problems of crime by any of the activities which such an institution can undertake, then it would appear to be not only desirable but imperative from the social point of view that an institute be established. The criterion by which the desirability of founding an institute of criminology and of criminal justice is to be determined, is its social utility. The institute would be primarily, if not exclusively, an academic institution, by which we mean an institution which would be concerned chiefly, if not exclusively, with theoretical problems. Criminology is not a practical activity in the sense that the prevention of crime, for example, is a practical activity, it is a body of knowledge relating to crime and criminals. Criminological problems are questions as to knowledge, not as to practice. In the same way criminal justice must here be taken to refer to that body of knowledge which is related to the criminal law and its administration.

with respect to its practical utility, and with respect to the kinds of knowledge needed as a condition of the solution of the more fundamental of the practical problems of crime. We shall then make our recommendations, both positive and negative, with regard to the establishment of an institute. In our positive recommendations we shall state our judgments regarding what an institute should do and how it should be organized and administered in order most effectively to accomplish its purposes. In our negative recommendations we shall express our judgments regarding what an institute should not do, and the reasons why an institute should avoid those activities.

Our recommendation that an institute of criminology and of criminal justice be established at this time is based upon the need for knowledge as a condition of the solution of the major practical problems of crime.² Judged by that criterion we do not regard this recommendation as one about which reasonable men can disagree.³ Our recommendations regarding the scope and character of the institute's activities and the nature of its personnel are based upon the conclusions which we have reached

sole functions of an academic institution are to get and
 ess by which knowledge is obtained in an academic insti-
 search; that by which knowledge is transmitted to others is
 the process of instruction,—of training and of teaching. We happen to believe that an
 academic institution needs no other justification for its existence than its capacity to
 add to the store of human knowledge, regardless of whether or not the knowledge
 which it obtains can be given immediate application in practice. Therefore, unless
 knowledge regarding crime and criminals and the administration of the criminal law
 is perfect and complete, as it certainly is not, it would appear to be desirable to estab-
 lish an institute in order to add to our knowledge. Although the history of science
 and of technology demonstrates that this point of view is a highly practical one, we
 have nevertheless been guided by what practically minded men commonly believe to
 be a more practical attitude toward such matters. We have proceeded upon their
 assumption that it is desirable to obtain knowledge only if it has immediate practical
 utility, and that it would be desirable to establish an institute to engage in research
 only if the knowledge in which its research activities can be expected to eventuate,
 would be presently useful in the solution of the practical problems with which society
 is confronted in its struggles with crime and criminals. We have assumed that an
 institute's research activities would have social utility only to the extent that addi-
 tional knowledge regarding crime and criminals and the administration of the crim-
 inal law would now be useful in practice. We want to make it perfectly clear, how-
 ever, that we do not mean by this that research should be undertaken or planned with
 a view to the immediate solution of practical problems.

²Of course, we realize that, judged by *other criteria*, and particularly by practical considerations of one sort or another, reasonable men might disagree about the desirability of establishing an institute at this time.

in prior chapters and which we are about to summarize. The reader who has attentively followed the survey of knowledge there set forth, the criticism and evaluation of that knowledge, the exhibition of the methodological defects and inadequacies responsible for the fruitlessness of vast amounts of research in the fields of criminology and of criminal justice, and the analysis of the theoretical aspects of the practical problems of crime which indicated the kinds of knowledge needed for their solution, must concur in our definition of the end to be served by the establishment of an institute and in our prescription of the institute's program and personnel in order to fulfill this purpose.⁴

In other words, we do not regard the scope and character of the institute's activities and the kind of personnel needed to perform those activities successfully, as questions about which reasonable men can differ, if they accept the conclusions which we have reached. But those conclusions are answers to theoretical questions and as such are, as we maintain, either true or highly probable. They are true in so far as they are answers to theoretical questions about the nature of science, the end of law, the nature of justice, etc. They are probable in so far as they are descriptive propositions summarizing the knowledge in the fields which we have surveyed. In neither case are these propositions opinions. They are not *mere* assertions which can be refuted by contradictory assertions. We have always presented the demonstration of the propositions which we hold to be true and the evidence for the propositions which we hold to be highly probable. Therefore, our conclusions can be refuted only by showing error in analysis or by offering additional evidence in terms of which the degree of probability of our probable propositions is diminished. Hence, reasonable men can disagree with our recommendations regarding the scope and character of an institute's activities and the kind of personnel which it needs, only by showing that the conclusions which we hold to be

⁴Neither the recommendations themselves nor our reasons for making them will be clearly understood, except by one who has attentively and with a mind freed of prejudices followed our discussion up to the present point.

true are false or that the conclusions which we hold to be highly probable are slightly probable.

These recommendations, however, must be distinguished from those with respect to the manner in which the institute should be organized and administered. We have endeavored to formulate our recommendations with respect to these matters in the light of such knowledge as we possess and the relevant practical considerations. We believe that our solutions of these problems are wise solutions; and we submit them in that belief, but with full realization that reasonable men may disagree with one or more of them. The knowledge and experience in the light of which recommendations of this character must be formulated, do not point as certainly to the solution of these practical problems as they do to the solution of the problems of the scope and character of the institute's activities and the qualifications of its personnel.

The distinction between those of our recommendations about which we have said that reasonable men cannot differ *if* they accept our conclusions and those recommendations about which we have said that reasonable men can differ *although* they accept our conclusions, must not obscure the point that all of our recommendations are practical judgments. They are either wise or unwise, sound or unsound, intelligent or unintelligent.⁵ They can-

⁵We have proceeded upon a number of assumptions in formulating our recommendations. We have assumed that a plan for an institute should not be too specific or too detailed either with respect to its activities or to its institutional character. The plan should not be so rigid that the institute, if founded, will find itself in a strait-jacket and unable to accommodate itself to changing conditions. It should be so flexible that the institute will be able to take advantage of the lessons learned from its own experience. We have assumed, also, that a plan should not project beyond the first years of the institute's existence. The important considerations are to get it started in the right directions and to insure, so far as possible, that it will not be diverted from its course, but will follow it with a single-mindedness and devotion of purpose. Moreover, problems such as those involved in the establishment of an institute contain many imponderables for which provision can be made only by a plan which is elastic in its requirements and primarily concerned with preliminary arrangements. We have assumed, finally, that the all important element in the establishment of an institute is that of personnel. In the foundation and conduct of academic institutions, as well as in such practical undertakings as the enforcement of the criminal law, many problems owe their origin or their acuteness to the factor of personnel. If the personnel is wisely chosen, these problems disappear or lose their critical character. We have assumed that the staff of an institute will be wisely chosen. We have planned it on that assumption. *If the staff is not to be wisely chosen, there had better be no institute at all.*

not be asserted as true or probable; they cannot be proved by reference either to unquestionable principles or to evidence.⁶

Section 2. Conclusions.⁷

I. There is no scientific knowledge in the field of criminology.

A. We have no knowledge of the causes of criminal behavior or of the effects of different modes and varieties of treatment upon actual or potential offenders or of the efficacy of programs and measures of prevention.

1. In the absence of such knowledge we are and will continue to be impotent to control criminal behavior.

B. The knowledge which has resulted from criminological research is knowledge descriptive of the characteristics of criminals and of their environments.

C. This descriptive knowledge has little utility in the solution of the practical problem of controlling criminal behavior, either through programs of prevention or through the official treatment of offenders.

1. It can be employed only in trial and error attempts to control criminal behavior, and therefore has little practical value.

2. Such attempts cannot now be made the basis of experimental programs and, therefore, have little theoretical significance.

II. Empirical scientific research in criminology cannot be undertaken at the present time.

⁶In this respect they are to be distinguished from our *conclusions* which are, as we have said, answers to theoretical questions and, therefore, either true, false or probable

⁷Throughout this chapter we shall use such words and phrases as rational, empirical, theoretical, practical, scientific knowledge, descriptive knowledge, common sense knowledge, trial and error and technology, in precisely the same senses in which we have been using them in prior chapters. We shall now familiar with the meanings which we have assigned and we shall not pause to explain them again.

- A. The subject matter of criminology is criminal behavior, and criminology is, therefore, a dependent science.
- B. Criminology depends in large part upon the subject matters of psychology and sociology, and these subject matters have not yet been developed as empirical sciences.
- C. Since no theory or analysis has been developed in the fields of psychology and sociology, scientific research is not yet possible in these fields.
- D. The possibility of scientific research in psychology and sociology depends upon radical changes in the methodology of investigation in these fields, and this, in turn, depends upon the correction of the misconception or inadequate conception of empirical science and scientific method which is now prevalent in these fields and which we have characterized as raw empiricism.

III. There is knowledge descriptive of the processes and institutions of criminal justice. This knowledge is both quantitative and non-quantitative.

- A. The quantitative descriptive knowledge is incapable of unambiguous interpretation and therefore has little practical utility.
- B. The non-quantitative descriptive knowledge can be interpreted in terms of common sense knowledge of the conditions of efficiency in the administration of complicated enterprises and in the conduct of practical affairs. It therefore possesses great practical value.
 - 1. We do not now possess enough knowledge of this sort.
- C. Scientific knowledge of the etiology of administrative efficiency is not needed to solve many of the practical problems involved in the administration of the criminal law.
- D. Scientific knowledge of the etiology of administrative efficiency does not now exist, but would be highly useful in

the solution of the more complicated practical problems of criminal justice.

IV. The notion of retributive justice is untenable and a source of confusion and inconsistency in the criminal law; the criminal law should be directed toward the social good and not toward punitive retribution.

A. Behavior which is contrary to the social good, as that is determined by the constitution of a particular society, should be made criminal unless its prohibition by law would have greater social disadvantages.

B. The treatment of offenders can be either punitive or non-punitive but should be directed either to the incapacitation of incorrigible offenders, to the reformation of corrigible offenders, or to the deterrence of potential offenders.

C. If the ends of deterrence and reformation are opposed, treatment must be determined either as the result of a selection of one rather than the other of these ends, as socially more desirable, or by some compromise between them.

V. Neither the behavior nor the treatment content of the criminal law can be determined without empirical knowledge.

A. We must have such knowledge in order to determine the consequences of certain types of behavior.

B. We must have knowledge of the consequences of the administration of the criminal law in general, and of the effects of the administration of specific provisions of the criminal law.

C. We must have knowledge of the effects of various modes and varieties of treatment upon potential and actual offenders.

VI. Rational legislation and rational administration depend upon knowledge of various kinds.

A. Rational legislation and administration must be guided by an understanding of the end of the criminal law and of its foundations.

1. The rational sciences of ethics and politics afford the knowledge and analysis essential to this understanding.

B. Rational legislation and administration require knowledge of the consequences of various types of behavior and of the effects of various kinds of official procedure upon the behavior of actual and potential offenders.

1. Psychology and the social sciences do not at present provide us with this knowledge.

C. A science of the criminal law is needed in order to construct a rational code.

1. No such science now exists.
2. In the absence of such a science, knowledge of the history of the criminal law and of the institutions of criminal justice and knowledge of other systems of criminal law assume increased importance.
3. An historical and comparative study of the criminal law will supplement a rational study of the criminal law when it is developed.

VII. The fields of criminology and criminal justice can be unified in relation to the practical problems of rational legislation.

A. The work of an institute of criminology and of criminal justice can be unified by the problems which must be solved as a condition of the formulation of a rational code of criminal law. The consummation of this project can be regarded as the final purpose of such an institute.

Section 3. Positive Recommendations.

1. It is desirable at this time to establish an institute of criminology and of criminal justice.

- A. The scope and character of the institute's activities.

1. It should be devoted exclusively to research.

- a. It should engage in no instruction except the incidental training of assistants and apprentices in research.⁸

2. The research activities of the institute should proceed in several directions.

- a. It should conduct such research as may be necessary to lay the foundations of, and to begin the construction of, a science of criminology.

- (1) Of all the activities in which an institute of criminology and of criminal justice could engage, research directed toward this end is of the greatest theoretical significance and of the greatest practical importance.

- (a) It is of the greatest theoretical significance because until a science of criminology is

⁸This partly negative recommendation is repeated and our reasons for it are given *er*. Here we need say only that knowledge may be imparted, as well as acquired, without any view to its use in practical affairs, or it may be imparted with a view to its practical application. Although knowledge may be useful in practice, it does not apply itself to practical problems, it must be applied by men. Its application depends not only upon its existence but upon its dissemination. If those persons who are either officially or unofficially engaged with the practical problems of crime are ignorant of knowledge which is relevant to those problems, or of its applicability, or of the means by which it may be applied in practice, or if they lack the skill or techniques which may be indispensable to its application, the solution of practical problems is impossible except by chance; and experience does not justify reliance upon chance as a solvent of the problems of crime. Even if it can be maintained that the dissemination for cultural purposes of knowledge relating to crime and criminals and the administration of the criminal law cannot be justified in terms of its social utility, the dissemination of such knowledge with a view to its practical application would appear to be socially desirable. To the extent that relevant knowledge exists or is being developed which because of ignorance is not being applied or is unlikely to be applied to the solution of the practical problems of crime, instruction in criminology and in criminal justice would appear to possess social utility.

developed, it will be impossible to solve the basic theoretical problem of crime, namely, the etiology of criminal behavior.

- (b) It is of the greatest practical importance because until we have knowledge of the causes of criminal behavior, it will be impossible to solve the basic practical problem of crime, namely, the control of criminal behavior.
- (2) That such research may never succeed in the construction of a science of criminology or that it may succeed only after many years, does not detract from its practical importance.
 - (a) If it is impossible to construct a science of criminology, it is of the greatest practical importance that it should be known to be impossible, for until we know whether we can or cannot ascertain the causes of criminal behavior, our approach to the major practical problems of crime must be confused and uncertain, as it is today.⁹
 - (b) The practical value of knowledge which will enable us to control criminal behavior is so great that we should as soon as possible begin to make every intelligent effort to obtain such knowledge and continue such efforts as long as they give reasonable

⁹We do not know what to do, because we do not know what we can do and what we cannot do. In any event, if we knew it to be impossible to ascertain the causes of crime we might, at least, cease the wasteful expenditure of time and money which is now being made in futile attempts to solve that problem. We shall never know whether or not it is possible to construct a science of criminology unless we try to do so in the only way in which such an attempt could be successful. Not only will we never succeed in constructing a science of criminology by the raw empiricism which now characterizes criminological research, but we will remain in doubt regarding the possibility of constructing such a science.

promise of success, no matter how long that may be.¹⁰

- b. It should conduct such research as may be necessary to improve the methods of observation and the statistical techniques which are currently employed in criminological research.
 - (1) But it should not conduct such research except as a study in methodology and as incidental to that recommended above. This recommendation is therefore conditioned upon the acceptance of that recommendation.¹¹
- c. It should conduct empirical studies of the administration of the criminal law.
 - (1) While the theoretical significance of the descriptive knowledge which can be gained by such research is limited, its practical utility in attempts to increase the efficiency of criminal justice is great.
 - (a) While we have a great deal of such knowledge, there is much more of it which we lack.
 - (2) Such research, however, should not be regarded as of equal importance with that directed toward the construction of a science of criminology. Until such a science is constructed, we

¹⁰No rational person would suggest that we make no effort to ascertain the etiology of cancer because we may never succeed or because success may be long deferred.

¹¹This is *not* a recommendation that the institute engage in or foster the kind of research now prevalent in criminology, *except* to the extent necessary to study the methods now employed in efforts to differentiate criminals from non-criminals. While the results of such research are of trivial theoretical significance and little practical utility, the solution of its methodological problems is important. Sooner or later, these problems will have to be solved in the course of the construction of a science of criminology. If they are solved sooner rather than later, it will at least be made possible to obtain *valid* descriptive knowledge of the kind in which criminological research now results, and thus somewhat to increase its significance and its importance. We have no illusion that our criticism of work of this character will cause criminologists to abandon it. The tradition is too firmly established. Probably, it will continue to be subsidized by a misguided generosity.

shall be unable to discover the effects of the administration of the criminal law upon the behavior of actual and potential offenders and, hence, we shall be unable to say whether or not increased efficiency in the administration of the criminal law is for the social welfare.

- (3) The emphasis in such research should be upon that which is directed toward obtaining *non-quantitative* knowledge descriptive of the processes and institutions of criminal justice.

It should endeavor (1) to construct a rational science of the criminal law; and it should conduct studies (2) of the administrative code, (3) of the history of the criminal law and of the administrative code, and of the history of the institutions and of the administration of the criminal law, and (4) in comparative criminal law, both substantive and procedural.

- (1) The construction of a rational science of the criminal law is of practical importance because, as we have seen, it is prerequisite to both the rational legislative development and the rational administration of the criminal law.¹²
- (2) The study of the administrative code is of practical importance because, as we have seen, knowledge of the administrative code is essential both to an understanding of the processes of criminal justice and to the contrivance of methods for increasing their efficiency.¹³ In most cases in order to bring about alterations of the processes of criminal justice, it is necessary to alter the provisions of the administrative code.

¹²See Chapter XI, Section

¹³See Chapter IX.

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- (3) The study of the history of the criminal law, of the administrative code and of the institutions of criminal justice, is essential to an understanding of criminal justice as it exists today and, hence, to rational legislation and administration.
 - (4) The comparative study of both substantive and procedural criminal law is a means of enabling us to supplement our own wisdom and experience by the wisdom and experience of other peoples.
- e. It should hold itself ready to advise all who seek its advice, both those who encourage or promote or subsidize research in criminology and in criminal justice and those who plan and execute such research, regarding the theoretical significance and the practical utility of the knowledge which can be obtained by specific projects. It should also aid in the solution of methodological problems raised by these projects.
- f. These proposed research activities are compatible with one another and supplement one another.
- (1) Each of them is a necessary means to what should be regarded as the ultimate purpose of acquiring knowledge in the fields of criminology and of criminal justice, namely, the construction of a rational criminal code and of an administrative code which is best adapted to the rational administration of a code of criminal law.
 - (2) The construction of a science of criminology is of primary importance among these activities. The importance of the others is secondary in the sense that they alone will not enable us to con-

struct a rational criminal code, which, as we have said, should be our ultimate purpose.

- (3) While any one of these four activities can be undertaken alone and independently of the others, if only one is to be undertaken it should be that one which is of primary importance, namely, the construction of a science of criminology.
 - (4) If choice must be made among the others, the most important is research in the administration of the criminal law.¹⁴
- g. That there may be no doubt whatever about the meaning of these positive recommendations, we must here state a negative recommendation. If the criminological research of an institute must be of the same kind as that which has been and is now being done by criminologists, it would be better that no institute whatever be established, or, if established, that no criminological research whatever be done.

Discussion:

There seems to be a widespread belief that the common sense knowledge which we have about human nature is of practical value in attempts to control crime, either by itself or when supplemented by the findings of criminological research which, it is maintained, such knowledge enables us to interpret significantly and to apply practically. Those who possess that belief will, of course, disagree with our negative recommendation.

We do not deny that we have a great deal of common sense knowledge about human nature. It is the sort of knowledge

¹⁴It will be readily seen that it will be possible, if, indeed, it is not desirable, for the institute to undertake one or more of these activities in the beginning and gradually to enlarge the scope of its activities until it is engaged in all which we recommend.

which all men use in their daily contacts with their fellow men. The great orator, the 'magnetic' leader of men, the successful salesman, the outstanding novelist or dramatist are usually distinguished by the exceptional degree to which they possess the insight into and the understanding of human nature and behavior which are the common possession of all men. Much of what passes as 'scientific psychology' is knowledge of this sort disguised by the specious technical vocabulary of the academic psychologist. Thus, the literature of 'behavioristic psychology' has given mothers a new language in which to say what they already knew about their children. That a burnt child dreads the fire, is the same knowledge although stated in terms of conditioned reflexes, negative conditioning, negative visceral responses, etc.

The question, however, is whether such common sense knowledge of human nature, which is possessed by psychologists and poets alike, is useful in the control of criminal behavior, either by itself or when supplemented by knowledge of the characteristics of criminals and of their environments. If it can be usefully applied by itself in efforts to prevent crime, its application is not dependent upon, nor is its utility increased by, criminological research. Such knowledge is not the product of criminological research which, at most, only reaffirms what common sense already knows about human nature; and, by hypothesis, it possesses practical value independently of the findings of such research. Therefore, we do not have to conduct research in criminology in order to employ common sense knowledge of human nature by itself in efforts to prevent crime. However, it should be pointed out that although we have long possessed and used such knowledge in our struggles with crime, we are certainly not satisfied by the degree of success, whatever it may be, which we have achieved by means of such knowledge; and there is no reason to believe that by means of such knowledge alone we shall be more successful in the future.

Whatever utility common sense knowledge of human nature may have in the control of criminal behavior, when supplemented

by the findings of criminological research, is dependent upon the ability of common sense to make significant etiological interpretations of descriptive knowledge about criminals and their environments. But, as we have already seen, this descriptive knowledge cannot be given any etiological interpretation whatsoever, although, as we have also seen, common sense does incorrectly infer causal relationships from data which are inadequate as a basis for such inferences. These inferences are, therefore, unfounded opinions upon which we can proceed in practice only by trial and error.

In short, (1) common sense knowledge is by itself inadequate to cope with the practical problem of controlling crime, and (2) the descriptive knowledge yielded by criminological research does not supplement common sense so as to compensate for its inadequacy. It is for these reasons that we recommend that criminological research of the kind which has been and is now being done, *should not be continued*.

B. The structure and the personnel of the institute.¹⁵

1. It should be established in a large university, but it should be autonomous within the university.
 - a. It should be established in a university so that it may avail itself of such of the university's facilities as the library, thus avoiding the necessity of duplicating such facilities and reducing the cost of establishing and maintaining the institute.¹⁶

¹⁵The elements of an academic institution are the same as those of any other. It has a structure, or mode of organization, a personnel and physical facilities. While our recommendations constitute a plan for an institute we have not attempted to formulate a plan complete in all respects. For our purposes it is unnecessary to consider such matters as the location of the institute, its physical facilities, its budgetary requirements and like problems which would have to be taken into account by a complete plan.

¹⁶Other advantages which might be expected to accrue to the institute from its integration in or affiliation with a university, are as follows: material facilities other than the library, the prestige and authority needed for such an undertaking, the intellectual community desirable for the members of the staff, the availability of a student body from which to recruit apprentices and assistants in research, and the general economy of reduced overhead expense.

- b. It should be established only in a university which will express itself as being in sympathy with the research program here recommended.
 - c. It should be autonomous, because autonomy is a condition of the successful accomplishment of the institute's purposes.
 - d. By autonomy we mean that the institute should at all times have control of the scope and character of its activities, of appointments to, and the compensation and promotion of the members of, its staff, and of its budgetary arrangements.
2. It should be a condition of the establishment of the institute in any university that the institute have autonomy as herein defined.¹⁷
 3. It is desirable that the school of law of the university and the institute should eventually become two of the members of a more comprehensive division of the university which will be devoted to the larger problem of social control by legal institutions and devices,¹⁸ and that in the meantime the school of law and the institute should be rather closely affiliated either by giving one or more members of the faculty of each institution seats on the faculty of the other, or by other appropriate means.

¹⁷We do not make more specific recommendations in this connection because it is possible to insure the institute's autonomous character by a number of different arrangements; and the precise nature of the arrangement employed for that purpose will necessarily be the subject matter of negotiations between the founders of the institute, if one is founded, and the university's board of trustees, and will depend somewhat upon the administrative policies of the university with which negotiations are conducted. The institute's autonomy would be most complete if it had its own board of trustees and a director answerable only to that board or, in the alternative, only to the president of the university who would be responsible to the institute's board. But a particular university's structure and administrative policies may be such as to make that arrangement impossible. *However, in no event should the institute be inferior in status or in dignity to any other division of the university*

¹⁸See the Report of the Dean of the Faculty of Law of Columbia University for the academic year ending June 30, 1931.

4. Complete executive power should be vested in a director or other administrative head of the institute, who shall be responsible only to the president of the university.
 - a. In the beginning, at least, appointments to the scientific staff of the institute should be made only upon the director's recommendations.¹⁰
 - (1) The director shall in all cases consult the members of the scientific staff with respect to proposed appointments thereto, but shall follow their advice and preferences only in so far as they commend themselves to his good judgment. It will ordinarily be a matter of good judgment for him not to recommend appointments which are distasteful to any considerable number of the staff.
 - b. The director shall have complete control over the scientific program of the institute, but not over the methods by which research projects are executed. This control shall be insured by giving him the power to veto any research project which in his judgment does not fall within the scope of the institute's activities as herein defined or which differs in character from that herein recommended
 - (1) This is necessary to insure that the institute's activities will at all times be directed toward the attainment of the ends for which it is established.
 - (2) The board of trustees by which the institute is governed shall have no voice in the determination of the scientific program of the institute, except that no alterations shall be made in the

¹⁰For reasons of administrative policy it may be necessary that his recommendations receive the approval of the president of the university but, on the other hand, it should be impossible for appointments to the institute's scientific staff to be made over the objection or without the approval of its director.

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scope of its activities, either by adding new activities thereto or by eliminating old activities therefrom, without the approval of the board.

- c. The director of the institute should ideally be a man who, in addition to executive skill and sound practical judgment, possesses these qualifications:

- (1) He should, of course, be thoroughly sympathetic with the research program herein recommended.
- (2) He should be sufficiently familiar with the critical literature of the empirical sciences and should have such a clear understanding of their methodology as to be able to distinguish between the kinds of research in criminology and in criminal justice which we have criticized and the kinds which we recommend.
- (3) It is desirable, although not indispensable, that he have some knowledge of law and of its administration and techniques.

5. The institution should consist of two divisions, a division of criminology and a division of criminal justice, but the director should be at the head of both.

6. Ideally, the members of the staff of the criminological division should consist of psychologists and sociologists who among themselves combine the knowledge, experience and techniques possessed by:

- a. A logician whose major interests are (1) formal analysis and the construction of theories and (2) the methodology of scientific research, especially induction and the theory of probability, and who is acquainted with the history of logic and of the sciences.
- b. A mathematician whose major interest is applied mathematics and who is competent to develop formulae for handling empirical data.

- c. A statistician who has worked with psychological or sociological data and who is not only a good critic of statistical method but competent to devise new statistical techniques.
 - d. A theoretical physicist²⁰ who is acquainted with the development of the basic concepts of the empirical science of physics and who understands what is involved in the construction and use of theory in an empirical science.
 - e. An experimental physicist²¹ who is acquainted with the problems of experimental research and especially with the techniques of measurement, and who is competent to invent new observational techniques and to coordinate observation with theory.
7. But there is no group of psychologists and sociologists which possesses such knowledge, experience and techniques. Hence, in order to form a staff for the institute's criminological division which will be competent to conduct the research which is essential to the construction of a science of criminology, it will be necessary to create such a group. The most expeditious and the surest way of doing so, is to take scholars from the fields which we have enumerated and put them to work on psychological and social data.
8. We therefore recommend that the staff of the criminological division consist of a logician, a mathematician, a statistician, a theoretical and an experimental physicist of the kinds which we have described and, in addition, of:
- a. A mathematical economist and a scholar from the field of psychometrics.

²⁰We are here using physics as an example of a developed empirical science. A theoretician from any of the developed empirical sciences, such as genetics or chemistry, would serve the purpose.

²¹See the preceding footnote.

(1) The former would, of course, be a social scientist and the latter, a psychologist. We include them because, as we have seen, mathematical economics is the sole example of a social science, and psychometrics, the sole example of a psychology, which have begun to develop as empirical sciences.

- b. A criminologist who has a wide acquaintance with the literature of criminology, preferably one who has not himself engaged in criminological research.

Discussion:

These recommendations require explanation.

In the first place, we must not be understood as recommending that the staff of the criminological division contain eight men, but only that the members of the staff, whatever their number, possess the knowledge and skills that would be possessed by the men whom we have described. There are men in whose education and experience fields of knowledge are combined and coordinated. Thus, a mathematical economist usually combines knowledge of statistics and applied mathematics with knowledge of the subject matters of economics and other social sciences. Similarly, the same individual may combine knowledge of logic and of the history and methodology of the sciences with philosophical training in the fields of ethics and politics which, as we shall see, will have to be represented in the staff of the division of criminal justice.

In the second place, we should be less than candid if we did not admit quite frankly that we have been driven by a dilemma into making a very radical recommendation which we nevertheless believe to be thoroughly sound. It is of tremendous social importance that a science of criminology be constructed. It must be constructed *either* by psychologists and sociologists *or* by others. But the psychologists and sociologists, because of their misconception or inadequate conception of the nature of an empirical science and of the methodology of the empirical sciences, have

shown themselves utterly incompetent to construct a science of criminology. Therefore, we must either abandon all efforts to construct such a science or we must turn to other men who are competent to construct it, if it can be constructed. We therefore naturally turn to men who know the nature of an empirical science and the history of the empirical sciences and who understand the methods by which they have been developed, and to men who are trained in the methods of the empirical sciences and are skilled in their use. It may be that these men cannot construct a science of criminology, but it is our firm conviction, first, that they can determine whether or not it can be constructed, and, second, that if it can be constructed, it can be done only by men with their knowledge and experience.

In the third place, while we know that there are men who possess the knowledge and skills which we have described, we do not know whether or not they would be willing to abandon their present tasks in order to join the staff of an institute. We believe, however, that a sufficient number of them would find an intellectual adventure of the kind which we propose attractive enough to enable the institute to form the staff of its criminological division.

In the fourth place, it should be made perfectly clear that in building up the staffs of both the criminological and criminal justice divisions, we contemplate that no compromises will be made. The director should first be chosen, and these staffs should then be assembled not hurriedly but with the utmost care and caution to the end that they shall consist of a group of scholars of the very highest attainments, although not necessarily of the most eminent reputations.

9. Ideally, the staff of the division of criminal justice of the institute should be composed of:

- a. A legal philosopher or a jurist whose major interest is in the field of jurisprudence.
- b. A student of the history of law and of legal institutions.

- c. A student of comparative law.
- d. A student of the criminal law and of the administrative code in its various aspects, whose major interest is in the rational analysis of these bodies of law rather than in the study of the administration of the criminal law.
- e. Students of the administration of the criminal law who have specialized, one in the field of police, another in the field of prosecution, and another in the field of treatment.

Discussion:

Again, it should be pointed out that the staff of the institute's division of criminal justice need not contain seven men at its inception, although eventually a staff of that size, if not a larger one, will be required. The reasons why we believe that the staff of this division of the institute should contain the knowledge and skills which we have just described, should be clear to a reader who has attentively followed the discussion in Chapters IX to XI, inclusive. The students of administration who are chosen as members of the staff should be men in whom the *practical* as well as the *theoretical* intellect is highly developed, and they should have had the broadest possible experience and the widest possible contacts in the field of criminal justice. We have drawn a line between the two divisions of the institute but it is not a hard and fast one. We do not envisage these two divisions as independent and unrelated units, as the whole tenor of this discussion must have made clear. For example, the staff of the criminological division would be expected to give consideration to, and to assist in the solution of, the methodological problems that arise in researches in criminal justice.

- 10. The staff of the institute should contain an adequate number of research assistants.
 - a. It is very difficult, if not impossible, to estimate the number of research assistants which would be needed;

but we estimate that not more than ten will be needed at any time to meet all requirements of both the criminology and the criminal justice divisions if the following recommendation regarding apprentices in research is adopted.

- b. A small number of carefully selected apprentices in research should be admitted to the institute to assist in the execution of research projects. Preference should be given to students who desire to devote their lives to work in the subject matters of psychology or social science, or in law or its administration. The number of apprentices so to be admitted and the conditions of their admission are matters to be determined by the director and staff of the institute.²²

Section 4. Negative Recommendations.

- I. The institute should engage in *no* activities whatever other than the execution of the research program herein recommended, to the end that the energies and efforts of its staff will not be diverted from that enterprise or its prosecution retarded.²³

- A. This is not to deny the need for or the practical importance of the other activities in which an institute might engage and which we are about to consider, but only to affirm the greater need for and the greater practical importance of the research activities herein recommended.

1. In any event, the institute could not engage in such activities and at the same time execute the research

²²In this way a body of psychologists and social scientists will be developed who will be competent to do the kind of research in which the institute will be engaged. The influence of the institute should thus spread rapidly beyond its own walls.

²³There are certain academic activities which are ancillary to the activities of research and instruction and in which an academic institution might therefore engage without losing its academic character. These are such activities as the maintenance of a library, the publication of a journal, and popular education as distinguished from instruction given to students within the institution.

program herein recommended without a much larger staff and much more extensive facilities than those which we have proposed.

II. The institute should engage in *no* other research than that herein recommended.

A. The institute should not engage in research in *police scientifique*.²⁴

²⁴The police field presents two more or less distinct sets of problems those of organization, administration and control and those of the methods and techniques of repression, detection, identification and prosecution. In the former class belong such problems as the centralization of police forces and activities, the relation between politics and the police, the scope of the police function, the selection and discipline of personnel, rural policing and the use of the uniformed patrol. Such problems are primarily for the political scientist and the student of police administration. As we have seen, considerable research has been done into problems of police organization, administration and control, especially in connection with the municipal police, consisting chiefly of description and classification.

Much less research has been done into problems of police method. These include problems both of technique and of training. The techniques of American police in criminal investigation are extremely crude, consisting largely of the use of the third degree, the 'stool pigeon', and the informer. *Police scientifique*, that is, the application of scientific knowledge and techniques to the detection of offenses and of offenders, so widely practiced in Europe, exists in this country only in embryo. Indeed, we are not even well informed regarding the present European techniques of criminal investigation. *Police scientifique*, as developed in Europe, was an outgrowth of professional and organized criminality, of changes in and the improvement of criminal techniques, and of the belief that every crime leaves material traces which can be detected through the application of photo-mechanical methods and chemical and bio-medical analyses. *Police scientifique* embodies the sum total of the experimental processes employed in the detection of crime. It draws chiefly upon the natural sciences. It has to its credit such achievements as the Bertillon and dactylographic methods of criminal registration and identification, the use of metric photography to reproduce the scene of a crime, and the classification of the criminal *modus operandi*.

Police scientifique implies (a) continuing research in order fully to utilize current scientific knowledge and techniques in its processes, and (b) a trained police personnel. It involves, therefore, the maintenance of a criminological museum and of a criminological laboratory for experimental and training purposes, the latter with chemical, physical, photographic, mechanical and instrumental, and identification divisions. Research in *police scientifique* requires the participation of experts in its various branches, chemistry, physics, microscopy, photography, dactyloscopy, etc. While the principle of police training has been widely accepted in this country, it has been acted upon to a relatively slight degree and there appears to be a general ignorance of what to teach and how to teach it. The scope and character of police training and the content of the curricula of police training schools are themselves problems requiring research.

Police scientifique, as it exists in Europe, is more than a scientific discipline. It not only implies research into its own problems and police trained in the application of its techniques to criminal investigation, it is also an integral part of the machinery for the administration of the criminal law. That machinery consists not only of police, prosecutors, courts and penal codes, but of criminalistic institutes and institutes of legal medicine. The criminalistic institutes are therefore very closely affiliated with administrative agencies. They function not only as centers of research and

B. The institute should not engage in research in legal medicine.²⁵

training, but also as adjuncts to police, prosecutors and courts by whom they are utilized for expert advice and services in specific cases. So, with the institutes of legal medicine, which are discussed in the next footnote. These two classes of institutes are the sources of supply of the forensic experts required in judicial investigation. All of this means that not only the police but lawyers, prosecutors and judges must be trained at least in the elements of *police scientifique* and of legal medicine in order to be able to weigh and evaluate expert testimony.

²⁵The term 'legal medicine' is sometimes used to refer to those provisions of law and custom which apply to the medical man,—which define his rights and obligations in his professional relationships with the community and his fellow practitioners. It is almost entirely in this sense that instruction is given in this country in legal medicine or medical jurisprudence, and we are not here concerned with legal medicine in that sense.

The term is used also as meaning the application of medical knowledge and techniques in the administration of law or, even more broadly, as meaning the application of all the natural sciences, including medicine, to the administration of law. Instruction in legal or forensic medicine in this sense is almost non-existent in America. Given its broadest meaning, as including the application of all the natural sciences to the administration of law, it obviously overlaps the field of *police scientifique*, and it is therefore not surprising to find that the activities of European criminalistic institutes and institutes of legal medicine do in fact overlap in part. However, the focus of legal medicine is upon the victim of crime or accident, upon the causes of death and the causes and extent of injury, or upon the mental and emotional constitution of the criminal agent, that of *police scientifique* is upon the detection and apprehension of the criminal agent.

Legal medicine is not limited in its application, either in theory or in practice, to the administration of the criminal law. While the functions of foreign medico-legal institutes vary, it is not at all uncommon for them to render important services in the administration of the civil law in the investigation of industrial and other accidents, in legal psychiatric examinations, and in other ways. Indeed, in some cases the experts of their staffs are officially attached to courts and prisons as forensic medical experts and as prison physicians.

However, medico-legal institutes are of especial importance in the administration of the criminal law and they are a part of the machinery for its administration. Thus, while the Institute of Legal Medicine in Paris is one of the divisions of the University of Paris, it may also be regarded as an integral element in the structure of the *Police Judiciaire*, which is that division of the Paris police which is charged with investigating the more important crimes. As an agency in the administration of the criminal law, the chief functions of a medico-legal institute are to determine the cause of death in cases of suspected crime, of accidental, sudden, or violent deaths, and in other cases, and to assist the tribunal in the determination of the responsibility of persons charged with crime, that is, their mental and emotional constitutions. Obviously, they must be capable of applying to thanatologic investigation any and all scientific procedures which may be relevant, such as pathology, toxicology, bacteriology, pharmacology, histology, chemistry and microscopy. Obviously, also, they must be capable of making psychopathological examinations. Finally, they must have the necessary facilities and equipment for post-mortem and other examinations.

Not only is the medico-legal institute an important agency in the administration of the criminal law, but its existence is difficult, if not impossible, unless it has official and legal status as such. That none exists in this country today is probably due in large part to the persistence of the coroner as the official agency for thanatologic investigations. Only in a few places has the medical examiner been substituted for the coroner. Without official status and with the most important of its activities barred to it by the persistence of the coroner system, it is doubtful if a medico-legal institute could occupy an important rôle in this country in the administration of law.

1. *Police scientifique* and legal medicine are the principal fields of research which are not covered by the research program herein recommended. Research in both fields is needed and existing facilities therefor are inadequate.
2. We do not say that research in these fields should not be done, but only that it should not be done in the institute which we propose.
 - a. It is of relatively less importance than the research which we have recommended.
 - b. For the institute to conduct research in *police scientifique* and legal medicine, it would be

Furthermore, it would find it difficult if not impossible to obtain the cadavers and other materials upon which its scientific and educational activities necessarily depend, although it might do so if connected with a public hospital.

And yet it is difficult to see how forensic medicine will be developed in this country without medico-legal institutes. The foreign institutes have become important centers of research and training, and the development of legal medicine to its present state is almost entirely the result of their scientific and educational labors. Obviously, the physician must be trained in legal medicine if he wishes to practice it, although it does not seem to be generally recognized that special training is required. Witness, for example, the coroner's physician drawn from general practice. Practically no instruction in legal medicine is being given today in American medical schools which is worthy of the name, and several factors militate against the giving of such instruction. The undergraduate curriculum is crowded without it. Effective instruction requires material, facilities and equipment not possessed by the run of medical schools. Legal medicine is not regarded as a necessary part of the equipment of the physician, whether general practitioner or specialist, and as long as the coroner system persists, professional opportunities in legal medicine will be limited.

While it is probably desirable that some instruction in legal medicine should be given to undergraduate medical students as a part of the medical curriculum, training for the profession of legal medicine should be a graduate activity. And instruction in forensic medicine should comprehend not only the theoretical and practical aspects of legal medicine, including legal psychiatry, but such instruction in medical law, to reverse the terms, including the laws relating to experts and their testimony, as the practitioner of legal medicine may need in order to discharge his functions, and such instruction in criminology as may be necessary to give him an insight into criminological problems. Provision, too, should be made for the instruction of lawyers, prosecutors and judges and of at least the higher police officials in the elements of legal medicine.

There are at least two cities in this country, New York and Boston, in which, because of the substitution of the medical examiner for the coroner and because of the educational and hospital facilities which they possess, conditions are favorable for the establishment of a medico-legal institute. In both cities there is ample post-mortem and other material passing through the medical examiner's office to provide for research and instruction in legal medicine, and in New York the medical examiner is in fact giving such instruction to the students of medical schools in the city. Plans have been prepared for a pathological institute in Boston which are largely built around the present pathological department of the Boston City Hospital.

necessary to establish within the institute a criminalistic institute and a medico-legal institute with their own staffs and with elaborate and costly physical equipment. This would greatly increase the cost of establishing and maintaining the institute.

- c. Research in *police scientifique* and legal medicine would be directed almost entirely toward problems which are different from and unrelated to the problems toward which the research which we have recommended would be directed.²⁶
- d. Research in legal medicine should be conducted either in a medical school or a medico-legal institute affiliated with a medical school.

III. Except for the incidental training of research assistants and apprentices in research herein recommended, the institute should engage in *no* instruction or training whatever.²⁷

²⁶The only point at which they would touch is in the fields of police and of prosecution. The student of both fields is interested in the methods employed in criminal investigations. The research program which we have recommended in the field of criminal justice is broad enough to include those matters to the extent that studies of the methods and practices employed and means of improving them are possible, but that is a different matter from conducting research in *police scientifique* or in legal medicine. Research in legal medicine, for example, can be conducted only by a pathologist or a toxicologist or a bacteriologist, and so on.

²⁷The opinion among persons whom we consulted was almost unanimous to the effect that the institute should engage in the incidental training of research assistants and apprentices in research. Beyond this, there was a sharp difference of opinion which centered around the issue whether or not the instructional activities of an institute would have undesirable effects upon its research activities; for the opinion was almost unanimous that research activities are of greater importance than training activities in the fields of criminology and of criminal justice, and that if one of the two sets of activities has to be omitted, it should be the training activities.

Perhaps the consensus of opinion was that the institute should engage in no teaching whatever, except the incidental training of research assistants and apprentices in research, on such grounds as that the training activities would tend to dominate and dwarf the more important research activities; that general instruction adapted to the intellectual level of the students would tend to lower the institute's standards and to produce a doctrinaire and propagandist attitude within the institute; and that there is not at the present time enough to teach.

- A. It should *not* give instruction in criminology, although the descriptive knowledge which exists in criminology is not now being generally applied in practice.²⁸
 1. Such knowledge has so little theoretical significance and such slight practical utility that it is not worth teaching.
 2. In any event, imparting this knowledge is of negligible importance in comparison with the importance of the research which we have recommended.
 3. In any event, this knowledge is now being taught by a number of existing institutions for cultural purposes and by an increasing number of institutions for practical or professional purposes.²⁹

The contrary opinion was based upon such grounds as that there now exists a body of knowledge which can be taught, especially in the field of the police; that research without teaching tends to become monastic and sterile, and that training is an indispensable method of giving the institute contacts with officials which it will need in its research activities.

However, even those who advocate that the institute should engage in teaching, are of the opinion that it should limit its instruction to the training of the higher officials and should not attempt to train officials generally.

The European institutes, such as the Paris *Institut de Criminologie*, Ottolenghi's *Scuola di Polizia*, the Lausanne *Institut de Police Scientifique*, the *Kriminalistische Institut* of the Vienna *Polizeidirektion*, and the Criminological Institute of the University of Vienna, do engage in teaching as well as research. Indeed, on the whole their instructional activities constitute the major part of their programs. However, these institutes are not on the whole comparable to that which we propose. Most of them are organized primarily around the work of the police or, at least, the processes of detection, identification and apprehension, and they are a part of the administrative machinery, as well as academic institutions.

Dr. Kirchwey has said that compared to research in criminology "the problems of a 'restatement' of the criminal law and its procedure and of police efficiency (*police scientifique*, forensic medicine, etc.) seem to me unimportant, not to say irrelevant, calculated to distract the interest of the institute and of the public from the more vital problem we are seeking to solve".

²⁸This knowledge and the similar knowledge which exists in the field of criminal justice are not now being generally applied in practice for three reasons, among others: (1) it must be applied chiefly by officials, and to a considerable degree officials are ignorant of it; (2) some officials who possess it do not have the capacity to utilize it intelligently; and (3) officials who are competent to apply it lack to a considerable degree the freedom of decision and action necessary to its application because of restraints in the administrative code.

²⁹See Appendix V of the authors' report to the Bureau of Social Hygiene entitled *An Institute of Criminology and of Criminal Justice*. This appendix contains a summary report of existing research and educational activities and facilities in America in the fields of criminology and criminal justice.

4. In any event, without increasing its staff, the institute would be unable to give instruction in criminology since, if our recommendations are followed, the staff will contain only one criminologist.
- B. It should *not* give instruction in knowledge of the administration of the criminal law or in knowledge which is useful in its administration, such as the bodies of knowledge known as *police scientifique* and legal medicine, although such knowledge is not now being generally applied in practice.
1. Such knowledge, unlike the descriptive knowledge which exists in criminology, is of practical utility and should be imparted to the officials of criminal justice.
 2. Existing facilities for imparting this knowledge to the officials of criminal justice and for instructing them in its application are inadequate and should be supplemented.⁸⁰
 3. But important as this work is, it is of minor importance in comparison with that of the research program herein recommended.
 - a. We do not say that institutions should not be established to give such instruction, but only that it should not be given in the institute which we propose.
 4. In any event, existing methods of selecting officials are such that individuals who may have been trained to perform the duties of officials, do not become officials, except by chance.
 - a. There is little basis in experience for the belief that any considerable number of persons who are not officials but who would like to become

⁸⁰See the preceding footnote.

officials, would enroll for such instruction were it offered them.²¹

5. By and large, if we wish our officials to be trained for their duties, we shall have to train them *after* they become officials.
 - a. There is little evidence that officials desire or will voluntarily seek such instruction. Compulsory education of officials is indicated.
 - b. The training of such officials as policemen, probation and parole officers and the personnel of penal and correctional institutions, is a function of government. Only government can exercise the necessary compulsion.
6. There are additional reasons why the institute should not give instruction in *police scientifique* and legal medicine.
 - a. These reasons are in part the same as those why the institute should not engage in research in those fields, namely, the large increase in staff and facilities that such instruction would entail, and the relative unimportance of the work.
 - b. Instruction in *police scientifique* is a function of and can be given successfully only by a criminalistic institute.
 - c. Instruction in legal medicine is a function of and can be successfully given only by a medical school or a medico-legal institute closely affiliated with a medical school.
 - d. The prevalence of the coroner and the rarity of the medical examiner and the methods by which coroners and their physicians are chosen,

o them to be a

are additional reasons why the institute should not give instruction in legal medicine.

- C. It should *not* give instruction in the criminal law, either substantive or procedural, or in the history of the criminal law, or in comparative criminal law.
1. Such knowledge is of practical utility and should be imparted to legislators, judges, prosecutors and attorneys practicing in the criminal courts.
 2. The teaching of such knowledge is the function of the law schools.
 3. The law schools are discharging that function very inadequately.³²
 4. Nevertheless, we do not recommend that this work be done in the institute, since it is a function of the law schools and since the giving of such instruction in the institute is objectionable for much the same reasons as those set forth above in other connections.
 5. However, it is to be expected that the institute's research in this field will directly influence the teaching of those subjects in the law schools and will thus indirectly influence legal education.
- D. The institute should *not* concern itself with *immediate* practical problems of crime either by attempting their solution or by assisting officials in their solution.³³
1. Again, we do not deny the importance of the work. We consider it relatively unimportant, and we be-

³²See footnote 29, *supra*.

³³Among the ways in which it has been suggested that an institute might cooperate with and assist officials in the solution of immediate practical problems are: by making penological surveys and advising and assisting legislators and prison administrators in the formulation and execution of policies and methods of treating offenders; by assisting police administrators in the solution of problems of police administration and training and in making specific criminal investigations; by supplying forensic experts of one sort or another; by making crime surveys for specific cities and states, etc.

lieve it to be unwise for an institute with the research program which we have recommended to undertake such work.

2. In any event, the practical problems of treatment and prevention are at present incapable of solution, and the institute could render very little assistance to officials who by trial and error are struggling with these problems.
3. In any event, the institute could not render assistance to legislative officials and to police, prosecutors and other officials engaged in the administration of the criminal law, without greatly enlarging its staff and physical facilities.
 - a. To assist in the execution of the processes of detection, identification, apprehension and prosecution, it would have to establish criminalistic and medico-legal divisions.
 - b. While the staff of the division of criminal justice of the institute which we have proposed could render assistance in the solution of the practical problems involved in improving the processes and institutions of criminal justice, their energies should not be dissipated in that manner.
- (1) Officials now have enough knowledge greatly to improve the administration of the criminal law. Their failure to bring about reforms is due not so much to ignorance, as to a lack of the will and the capacity to use the knowledge which they possess.

E. The institute should *not* publish a journal.

1. It is not to be expected that the efforts of the criminological division of the institute to construct a

science of criminology will have immediate results. Some time will probably elapse before it has anything to publish in that connection, and its publications will probably appear at infrequent intervals.

2. While the work of the division of criminal justice can be expected to yield results more quickly, there exist a sufficient number of journals in which to publish the results of its research.
3. In any event, the institute should adopt the policy of publishing the results of its researches in well rounded and thorough monographs instead of in desultory and fugitive articles of which there are now far too many. If we were permitted a word of admonition to the staff of the institute, it would be that they should not rush into print. The printing press has not proved to be an unmixed blessing; it has been an impediment as well as an aid to the advancement of knowledge.

IV. It should be apparent that throughout these negative recommendations we have been guided by judgments of relative practical importance. We recognize the urgency and crucial character of many of the practical problems of crime. We appreciate the motives which lead men to strive directly for their solution. But we insist that the zealous and over-anxious demand for immediate results ought to be restrained as short-sighted. The quest for valid and significant knowledge is ultimately the most practical procedure. Prudence and foresight compel what may seem to some to be a long and devious road to practical accomplishment, but the way of clear and useful knowledge is the shortest road because it is, in the long run, the only one.

- V. It should be borne in mind that the plan which we submit is a plan for the immediate future of the institute and

not a plan in perpetuity. At any time that it is deemed wise to add to the institute's activities any of the activities *against which we now very earnestly advise*, it will be possible to do so by enlarging its staff and facilities.

Section 5. The Larger Significance of the Proposed Institute.

The establishment of an institute to undertake the research program herein recommended would be a manifold benefaction. It offers an opportunity to accomplish much more than the acquisition of knowledge which will direct practical efforts to solve the problems of crime. The latter alone would, of course, justify the establishment of such an institute. The problems of crime are of such momentous social importance that the support of research which aims ultimately at their solution is of unquestionable merit.⁸⁴ But an institute such as we propose has other potentialities which enlarge its opportunities for usefulness and which enhance the value of its creation. In the first place, it could do much toward directing and encouraging scientific work in psychology and in the social sciences, and thereby stimulate the construction of empirical sciences of these several subject matters. In the second place, it could set an example in the analysis of legal materials, in the development of rational sciences of bodies of law, and in the introduction of significant empirical knowledge into the study and practice of law. These two points require brief elaboration.

The present situation in the fields of psychology and social science offers a great opportunity. These fields have now been under cultivation as fields of empirical research for a little less than a hundred years. Unfortunately, they were misguided in their inception by the leadership of such men as Auguste Comte, John Stuart Mill and Herbert Spencer. They were influenced throughout the nineteenth century by the dominant phenomenalis-

⁸⁴We feel that it has already been made sufficiently clear that the institute we have proposed would be the undertaking most likely to result ultimately in practically useful knowledge. Furthermore, we believe that it has been amply shown that no other type of research could be similarly recommended.

tic interpretation of the physical sciences. The raw empiricism which attended their origin and the course of their development in the nineteenth century was further accentuated in this country and in this century by the dogmas of pragmatism. Under this influence and against the background of defective higher education in our universities, men have become investigators and teachers in these fields without adequate knowledge of the history and methodology of the sciences, without knowledge of such useful rational instruments as logic and mathematics, without training in the use of mathematical and statistical techniques, and without broad philosophical orientation. A generation of students can rarely rise above the level of its teachers; and since the students of one generation become the teachers of the next, we can understand why the unfortunate influences which attended the origins of psychology and social science in the nineteenth century have persisted to this day.³⁵ Psychology and social science as research enterprises have received great impetus in America and in this century from two sources. The first can be called the 'Ph.D. industry,' which has made it either academically necessary or academically profitable for young men to do either trivial or ill-considered pieces of work in the tradition of their teachers.³⁶ The second source is the tremendous sum of money which has been available to endow and subsidize research in psychology and the social sciences. Millions of dollars have stimulated research which would not and could not otherwise have been done. If the attainment of valid and significant empirical knowledge was the intention and hope of the sponsors of this research, it must be said that their money has been largely wasted.

In view of this situation the opportunity which is here presented is indeed a striking one. If an institute were established

³⁵Mathematical economics and psychometrics constitute exceptions which we have already discussed in Chapter IV. It can be added here that as exceptions they prove the rule. Such men as Cournot and Jevons did early work in mathematical economics and not only escaped the influence of, but in the case of Jevons, definitely opposed, the dogmas of Comte and Mill. Work in psychometrics, furthermore, is now being done by men who are well trained in mathematics and statistics.

³⁶Technical journals have in many instances been created to make the publication of dissertations possible; in many cases dissertations constitute a large part of the periodical literature.

to lay the foundations for, and to begin the construction of, an empirical science of criminology, it would necessarily have to correct the defective methodology, the raw empiricism now prevalent in the fields of psychology and social science. Moreover, as we have pointed out, the construction of an empirical science of criminology would require the development of empirical sciences of psychology and sociology. Therefore, the institute proposed has the opportunity of effacing the false start which psychology and the social sciences made in the nineteenth century, of counteracting the tradition which has grown up, the futility of which is evidenced by what it has yielded, or rather failed to yield, so far. While the millions of dollars which have already been expended cannot be made to bear fruit, at least further fruitless expenditures can be averted.

We now turn to the second of these opportunities. Since the turn of the century the law schools of this country have been interested in the *rapprochement* of law and the social sciences. This interest has unfortunately not been enlightened by the clear realization that no empirical sciences exist with which law could be profitably allied. Teachers of law cannot be blamed for having accepted what is both the prevalent academic and the popular conception of social science. While there is no question that the study and practice of law can employ knowledge to be gained from the fields of psychology and social science, valid and significant knowledge must exist in order to be employed.⁸⁷

The raw empiricism which has prevailed in psychology and social science has its counterpart in the research of legal

⁸⁷Here we must again distinguish between descriptive and scientific knowledge. In our discussion in Chapter IX of the administration of the criminal law, we pointed out that descriptive knowledge which can be significantly interpreted in terms of common sense generalizations is of utility in the solution of the practical problems of the administration of law. But its utility depends upon its validity as well as its susceptibility to common sense interpretation. Therefore, we do not quarrel with the use by lawyers of such knowledge wherever they can find it. We merely point out in this connection that they should not assume it to be valid because they discover it in what is supposed to be a scientific journal. The major point that we wish to make is the failure of the lawyer to distinguish between descriptive and scientific knowledge, or, if he distinguishes between the two, his assumption that scientific knowledge is to be found in psychology and the social sciences. This is of great importance because frequently the lawyer's problems can be solved only by scientific knowledge and his uncritical use of what purports to be, but is not, such knowledge can be attended with no good results.

scholars. It goes by the name of legal realism or realistic jurisprudence. It has been developed under the influence of psychology and sociology; in fact, the precursor of realistic jurisprudence was called sociological jurisprudence. It has, in addition, been guided in its aims and methods by current American pragmatism. We have previously discussed both the value and the defects of this movement in legal research.³⁸ It is only when this movement becomes extremist and doctrinaire in its exclusive insistence upon the empirical study of 'law in action' that it is a serious evil. It has in some quarters exerted this unfortunate influence; it has depreciated and discouraged rational legal analysis.³⁹

This situation in legal scholarship also offers an opportunity for the institute we have proposed, since its activities are in part to be directed toward the establishment of valid and significant knowledge about the administration of the criminal law, which is an instance of 'law in action', and the construction of a rational science of criminal law, which will provide an example for similar work in other branches of substantive and procedural law. Finally, in aiming at rational legislation and the development of a code of criminal law based upon both legal analysis and adequate empirical knowledge, the institute should be able to show clearly and concretely what is involved in the *rapprochement* of the social sciences and the study and practice of law.

The institute which we have proposed, therefore, not only has an obvious practical justification in the importance of the problems of crime, but it should also mark the beginning of a reaction against our nineteenth century heritage, and be the symbol of the reinstatement of reason both in science and in law.

³⁸This will be found in Chapter XI.

³⁹This is to be understood in the light of the distinction, which we made in Chapter XI, between a proposition of law considered as a definitive or prescriptive proposition, and the same proposition considered as an empirical or descriptive proposition. The point we make is not that the study of such propositions considered as empirical propositions is not within the province of the legal scholar or that in studying them as empirical propositions he should not resort to all relevant empirical knowledge, but that when he is engaged in such work he is not engaged in the study of law. No empirical investigation can be regarded as a study of propositions which are not empirical. Empirical studies of legal institutions or activities cannot be distinguished from empirical studies of other social institutions and activities. The distinction between what is and what is not properly legal research is crucially important if clear thinking about either type of research is to be done.

APPENDIX I

	CLEVELAND ^a		MISSOURI ^b				ILLINOIS ^c	
	1919		1922-1924				1926	
			State	St. Louis City	Jackson County	36 Counties	State	Chicago and Cook County
ARRESTS								
Total number	4499 ^a		7032 ²¹	1492 ²¹	1697 ²¹	3543 ²¹	16812 ¹⁸	13117 ¹⁸
Per cent	100		100	100	100	100	100	100
Discharged	12 71							
Miscellaneous								
PRELIMINARY HEARING								
Eliminated on responsibility of prosecutor	8 49 ^a		2 59	5 70	47	2 00	5 2	6 1
Nolle prosequi, dismissed without prosecution	1 27		9 80	1 47	30 35	2 46	17 0	19 5
Discharged	10 74		8 16	7 98	15 14	4 06	16 4	18 2
Charge reduced	1 78		2 77	7 37	1 36	90	2	14
Bail forfeited							3 2 ¹⁴	3 5 ¹⁴
Miscellaneous	.53		2 76	5 42	3 24	1 24	1 24	1 1
GRAND JURY								
No true bill	13 89		3 26 ¹⁸	5 03 ¹⁸	2 06 ¹⁸	3 36 ¹⁸	9 7	10 6
Indicted for misdemeanor							5	3
Miscellaneous							1 93	6
TRIAL								
Eliminated on responsibility of prosecutor	10 01		15 73	6 84	15 97	19 79	11 7 ¹⁸	10 9 ¹⁸
Nolle prosequi, dismissed want prosecution	31						1 3	1 7
Dismissed	.30		3 57	2 48	53	5 31	6	5
Mistrial			65	13	29	1 07	1	05
Acquitted	4 54		4 59	5 56	2 89	5 28	Jury 2 2	Court 1 7
Bail forfeited	1 79 ¹⁰						1 0 ¹⁴	2 2
Miscellaneous	2 96		8 66	5 50	4 54	12 64	3	9 ¹⁴
Pending							4 7	25
Plea of guilty to lesser offense	4 28 ^a						5 8	5 7
Plea of guilty to same offense	19 58 ^a		30 59	39 14	17 03	34 41	10 8 ¹⁸	10 2 ¹⁸
Convicted of lesser offense	1 48		1 18	94	59	1 61	0 3	0 2
Convicted of same offense	5 84		6 28	6 50	5 83	6 86	Jury 1 8	Court 1 7 ¹⁷
Appeals			2 23	1 81	2 24	2 48	0 2	2 1 ¹⁷
New trial granted (by trial court)							0 3	0 3

^aCleveland Foundation Survey, Criminal Justice in Cleveland (1922) Mortality table of felony cases, arrests to convictions, of 1919, pp 95, 237

^bMissouri: Association for Criminal Justice, The Missouri Crime Survey (1926) Mortality table, felony cases, arrests to convictions, 1922-24, pp 274-276

^cIllinois Association for Criminal Justice, The Illinois Crime Survey (1929) Felony cases, arrests to convictions, 1926, pp 38, 41, 43, 53

^dNew York Crime Commission, Report to the Commission of the Sub-commission on Statistics (1928) Felony cases, arrests to convictions, second half 1926, pp 68-77 New York Crime Commission, Report (1927) Felony cases, arrests to convictions, 1925, p 152 Ibid pp 153-154

^eH. N. Fuller, Criminal Justice in Virginia (1931) Disposition of cases in trial stage, 1917, 1922, 1927, pp 94, 97, 99, 100

^fThe cases for the year 1919 in the Municipal Court (preliminary hearing) and the cases in the Common Pleas Court (trial stage) for the year 1919 were studied separately. The mortality table makes the assumption that they represent a continuous process. See Criminal Justice in Cleveland, pp 93-94

^gIncludes "no papers"

^hSeparate figures given for "original pleas of not guilty changed to pleas of guilty lesser offense"

ⁱSeparate figures given for "plea not guilty changed to plea of guilty offense charged".

^jIncludes "never in custody".

MORTALITY TABLES

Milwaukee	NEW YORK ⁴				1925	VIRGINIA ⁵					
	Second Half of 1926		1925			—All Charges—		—Felonies—			
	State	New York City	Rural	New York City	State	1917	1922	1927	1917	1922	1927
1838 ¹¹	12147	8144	1312	19468							
100	100	100	100	100							
				1 97							
1 74											
1 36				43							
12 79	34 66 ¹²	40 04 ¹³	9 45 ¹⁴	39 79							
	15 32	16 09	4 57	15 87							
1 2 ¹⁴	07	09	15	.16							
27	2 53	2 55	1 53	66	Number						
					11354						
					Percent						
...	10 10	10 33	16 08	11 62	100						
				25 28							
	04		0 38	47	81	No	No	No	No	No	No
	56	04	1 68	15	84	2447	3766	3475	635	1178	1136
						Per	Per	Per	Per	Per	Per
						cent	cent	cent	cent	cent	cent
						100	100	100	100	100	100
4 6 ¹⁴	1 14	59	3 20	68	1 90	33 0	36 0	23 0	18 0	27 0	20 0
1				06	13						
9 2	2 90	3 90	1 45	3 51	6 46						
.1	10	04	30	07	22						
Jury Court	2 63	2 76	3 89	2 59	5 44	14 0	13 0	12 0	19 0	15 0	15 0
2 0											
1 0 ¹⁴	1 1	56	2 29	01	.15						
1 1	2 26	1.57	5 87	14 ¹⁵	87 ¹⁶	10 0 ¹⁶	6 0 ¹⁶	7 0 ¹⁶	9 0 ¹⁶	7 0 ¹⁶	8 0 ¹⁶
.1				1 25	3 19						
9	8 70 ¹⁷	10 69 ¹⁸	5 72 ¹⁹	13 85 ²⁰	26 02 ²¹	24 0	29 0	43 0	28 0	30 0	40 0
37 5 ¹⁴	15 40	9 0	37 64	3 91 ²²	20 72 ²³						
Jury Court						18 0	15 0	15 0	27 0	21 0	17 0
0 1	59	68	38	58	1 44						
0 7											
Jury Court	2 07	1 24	5 41	1 12	3 77						
2 6											
20 9 ¹¹											
0 1											
0 3											

¹¹Listed as "warrants issued"

¹²The major category is "no information issued" There were but nine no bills in the total state, none in Jackson County, six in St. Louis City three in the thirty-six rural counties

¹³This figure includes "original indictments" which do not go through a preliminary hearing. With the grand jury stage, however, the original indictments can be merged in the sum total of cases. There were 2,889 original indictments for the state, and 1,866 for Chicago and Cook County. This figure is that for cases instituted, not arrests

¹⁴Bond forfeited, not apprehended

¹⁵This figure covers, among other categories, "stricken with leave to reinstate", and "stricken, account other indictments"

¹⁶"Felony waived, plead guilty, convicted" and "Plea accepted, guilty offense charged", listed as separate items

¹⁷"Felony waived, convicted"

¹⁸No indication whether this includes discharged without prosecution and nolle prosequi

¹⁹In all the New York Crime Commission studies, "other offense" we take to be "lesser offense"

²⁰Cases "adjudged feeble-minded or insane", when so found before determination of guilt or innocence, separately listed.

²¹Includes only those eliminated by appeal

²²Disposed of as misdemeanor

²³This includes the item "no disposition" which is separately listed in the study

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